

Dynamic Cone Penetrometer (DCP) Test Results

Test No: DCP04

Chainage:

Tested By: OS/GC

Start Layer:

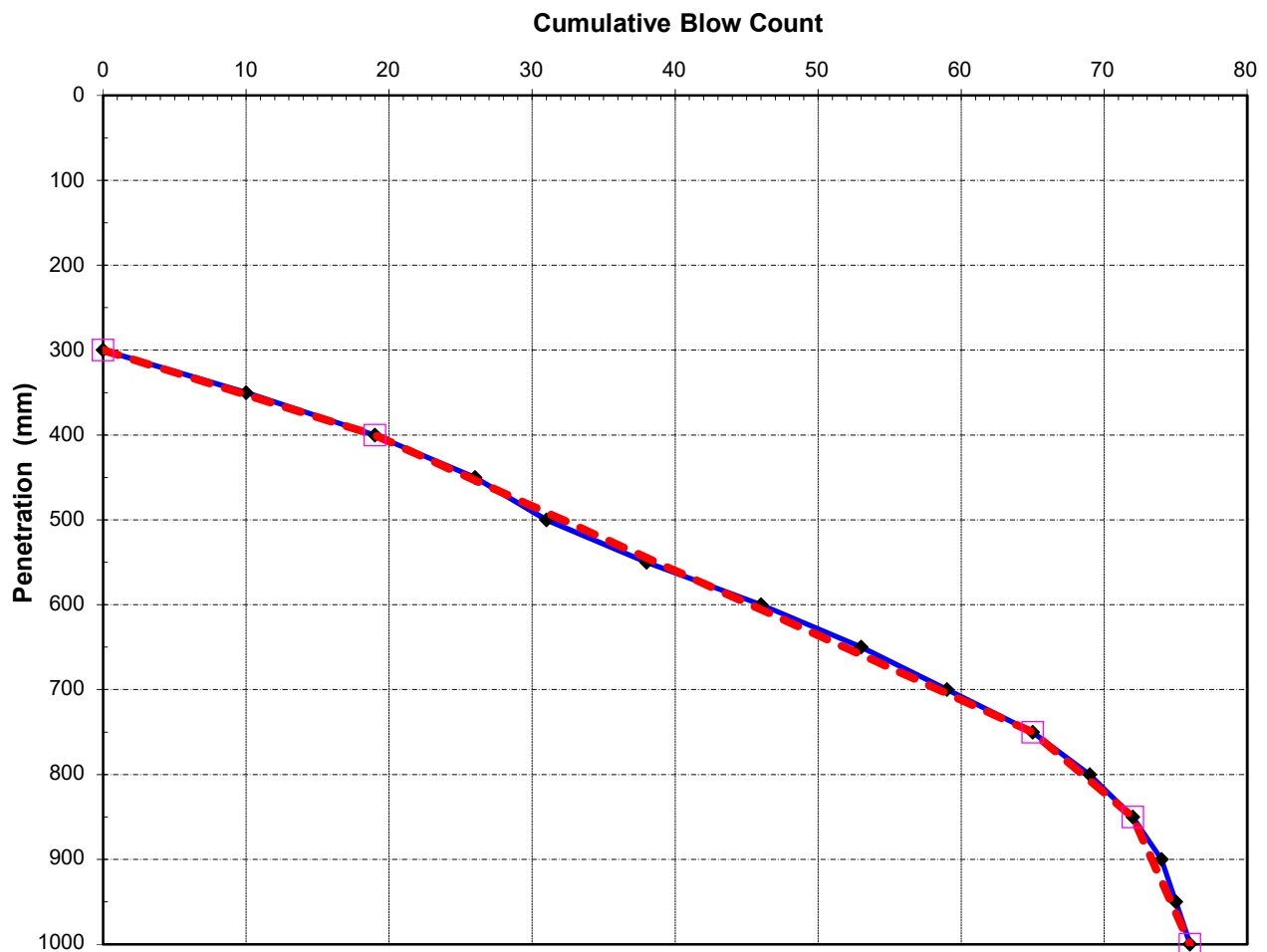
Checked By: VF

Soil Condition:

Test Date: 30-Jul-24

Notes:

Perth Cone CBR Penetration vs Cumulative Blow Count



Evaluated CBR Values from DCP Test Results

Layer No	From (mm)	To (mm)	Depth (mm)	Blow Count	No. of Blows	DCP mm/blow	CBR %	Soil Type	Remarks
1	300	400	100	19	19	5.3	51		
2	400	750	350	65	46	7.6	32		
3	750	850	100	72	7	14.3	14		
4	850	1000	150	76	4	37.5	4.1		

Client: Glanville Consultants Ltd

Job No: J15721

Site: Molesworth Street, Rochdale, OL16 1TL

Date: 25/09/2024

Fig. DCP04

Dynamic Cone Penetrometer (DCP) Test Results

Test No: DCP05

Chainage:

Tested By: OS/GC

Start Layer:

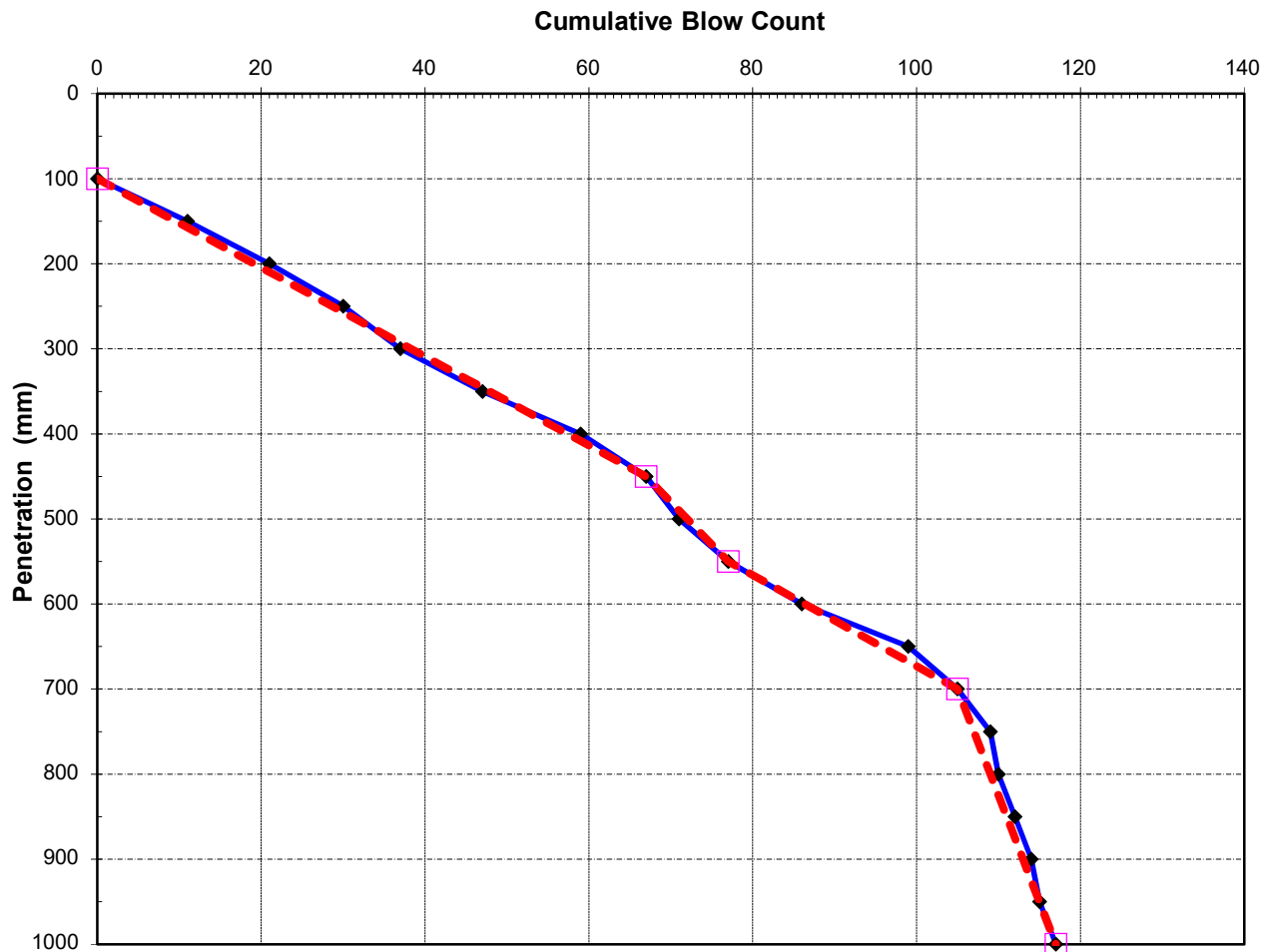
Checked By: VF

Soil Condition:

Test Date: 30-Jul-24

Notes:

Perth Cone CBR Penetration vs Cumulative Blow Count



Evaluated CBR Values from DCP Test Results

Layer No	From (mm)	To (mm)	Depth (mm)	Blow Count	No. of Blows	DCP mm/blow	CBR %	Soil Type	Remarks
1	100	450	350	67	67	5.2	52		
2	450	550	100	77	10	10.0	22		
3	550	700	150	105	28	5.4	50		
4	700	1000	300	117	12	25.0	7.0		

Client: Glanville Consultants Ltd

Job No: J15721

Site: Molesworth Street, Rochdale, OL16 1TL

Date: 25/09/2024

Fig. DCP05

Dynamic Cone Penetrometer (DCP) Test Results

Test No: DCP06

Chainage:

Tested By: OS/GC

Start Layer:

Checked By: VF

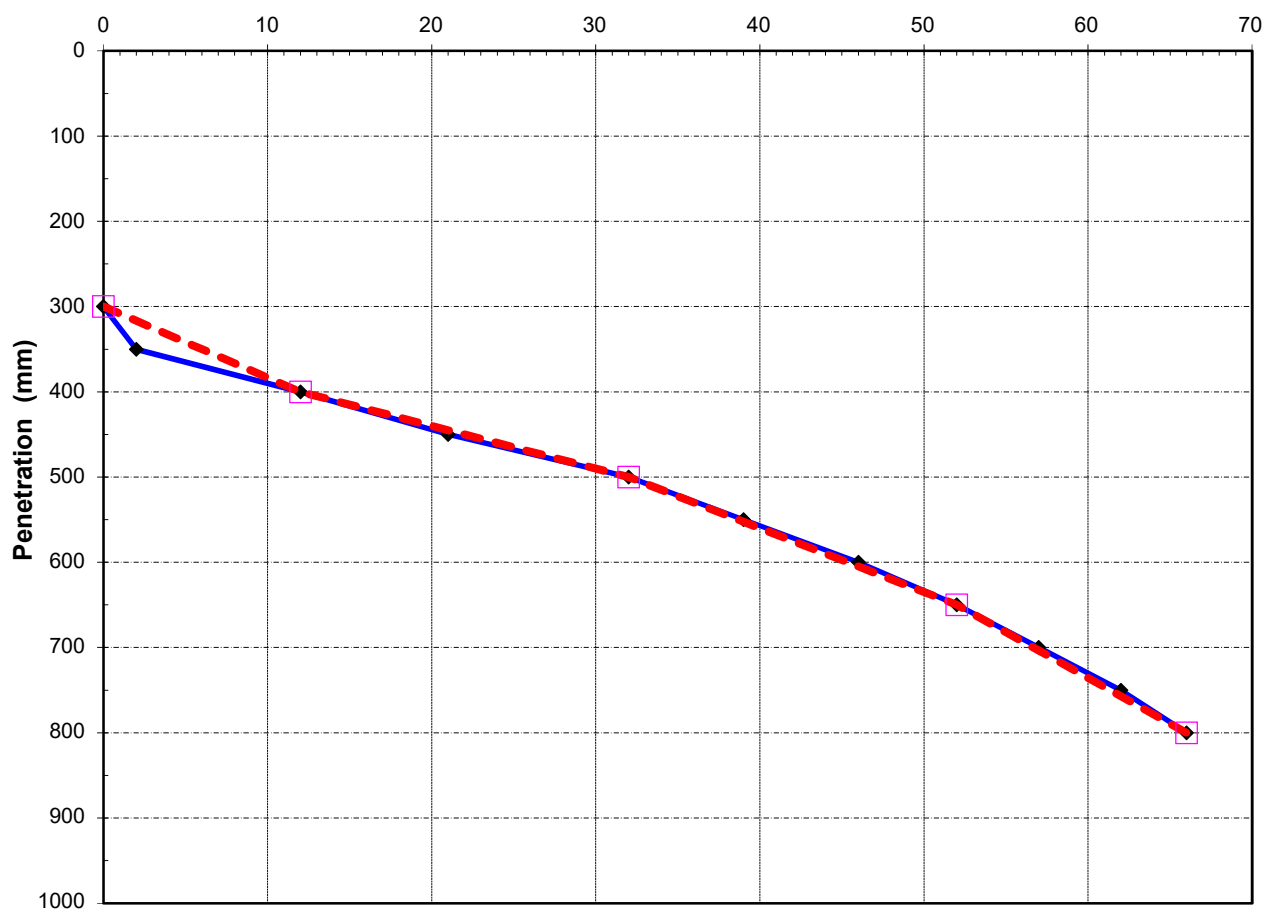
Soil Condition:

Test Date: 31-Jul-24

Notes: DCP refused at 0.85m.

Perth Cone CBR Penetration vs Cumulative Blow Count

Cumulative Blow Count



Evaluated CBR Values from DCP Test Results

Layer No	From (mm)	To (mm)	Depth (mm)	Blow Count	No. of Blows	DCP mm/blow	CBR %	Soil Type	Remarks
1	300	400	100	12	12	8.3	28		
2	400	500	100	32	20	5.0	55		
3	500	650	150	52	20	7.5	33		
4	650	800	150	66	14	10.7	21		

Client: Glanville Consultants Ltd

Job No: J15721

Site: Molesworth Street, Rochdale, OL16 1TL

Date: 25/09/2024

Fig. DCP06

Dynamic Cone Penetrometer (DCP) Test Results

Test No: DCP08

Chainage:

Tested By: OS/GC

Start Layer:

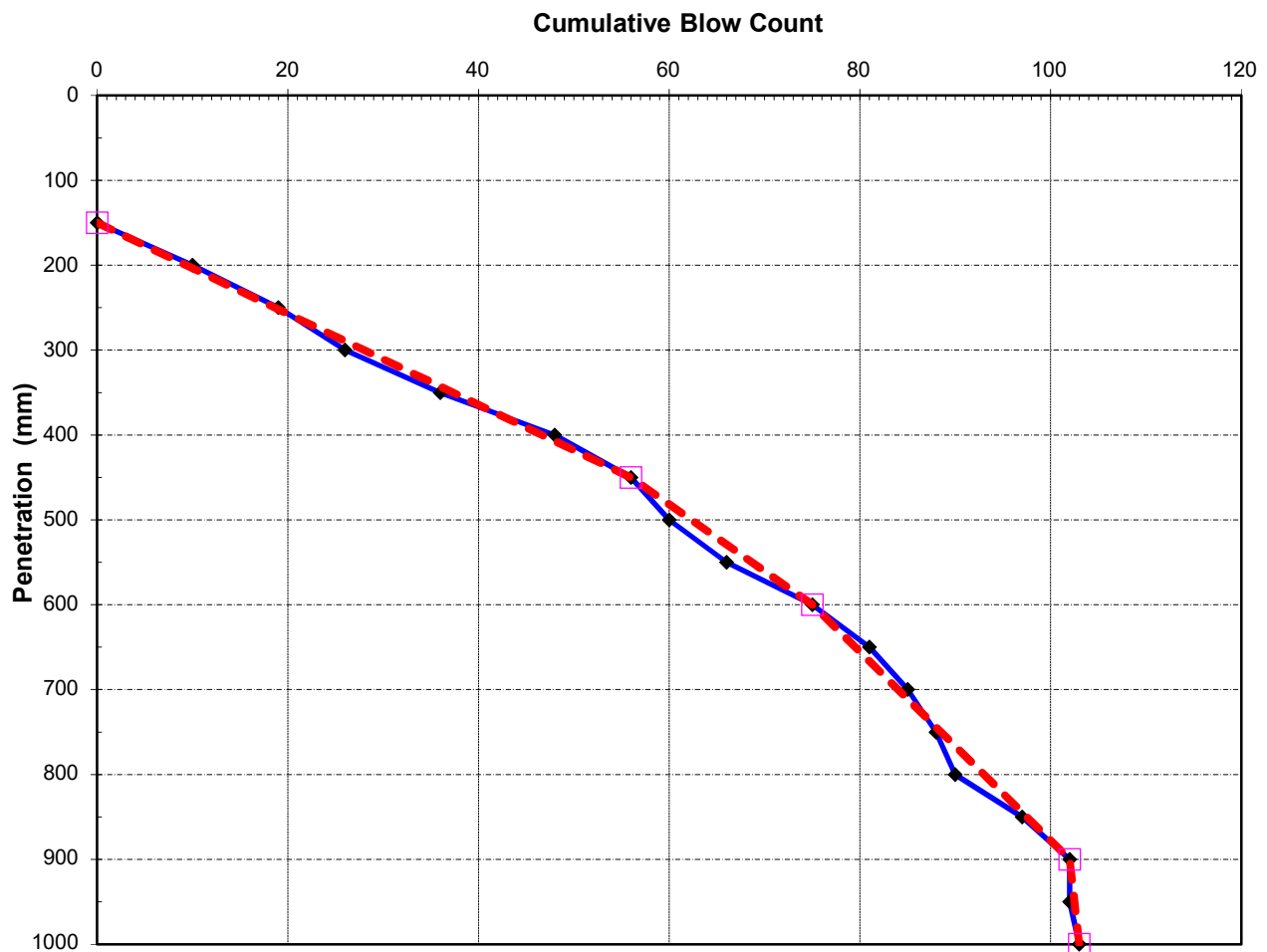
Checked By: VF

Soil Condition:

Test Date: 31-Jul-24

Notes:

Perth Cone CBR Penetration vs Cumulative Blow Count



Evaluated CBR Values from DCP Test Results

Layer No	From (mm)	To (mm)	Depth (mm)	Blow Count	No. of Blows	DCP mm/blow	CBR %	Soil Type	Remarks
1	150	450	300	56	56	5.4	50		
2	450	600	150	75	19	7.9	30		
3	600	900	300	102	27	11.1	20		
4	900	1000	100	103	1	100.0	1.2		

Client: Glanville Consultants Ltd

Job No: J15721

Site: Molesworth Street, Rochdale, OL16 1TL

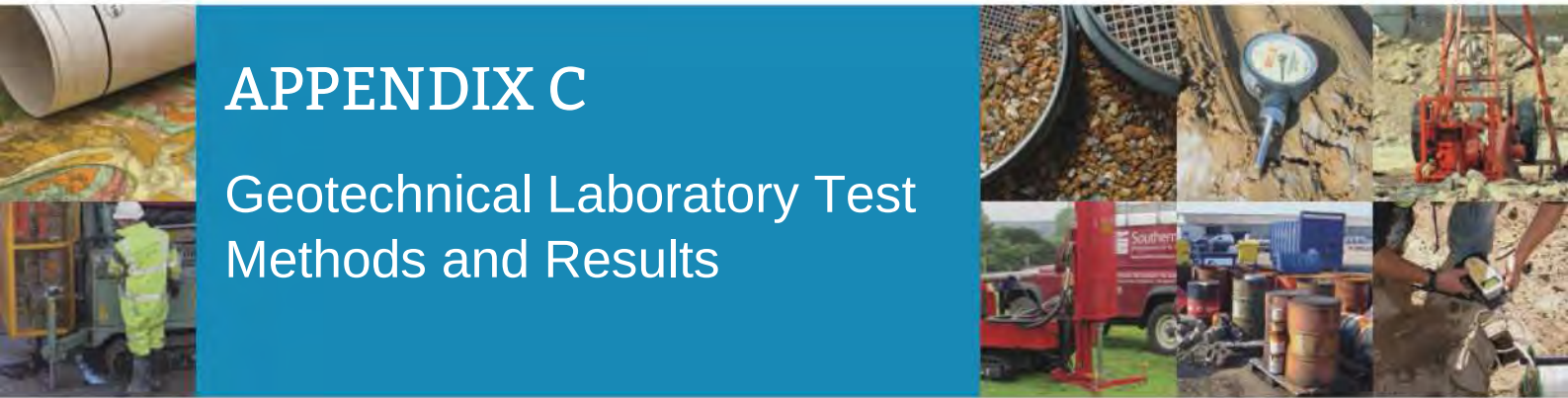
Date: 25/09/2024

Fig. DCP08

Client:	Glanville Consultants Ltd	Job No: J15721	
Site:	Molesworth Street, Rochdale, OL16 1TL	Date: 25/09/2024	Fig. DCP09

APPENDIX C

Geotechnical Laboratory Test Methods and Results



Plasticity Index and Water Content Summary

BS1377-2:2022 cl. 5, BS EN ISO 17892-1:2014 + A1:2022, BS EN ISO 17892-12:2018 + A2:2022

Project Name		Molesworth Street, Rochdale					Project Number		J15721	
Client		Glanville Consultants Limited				PE	CL	Date Issued		27-Aug-24
Location ID	Depth m	Sample Type	Visual Description	Comments	Initial WC %	Liquid Limit %	Plastic Limit %	Plasticity Index	Classi- fication	Passing 425 micron %
BH01	4.00	B	Soft dark grey brown sandy slightly gravelly organic CLAY. Gravel consists of fine and medium subangular sandstone.	Sample passed through 425µm sieve	22	24	15	9	CLO	93
BH01	7.50	B	Stiff brown black slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular and subrounded siltstone.		16	32	15	17	CL	95
BH02	5.00	B	Firm dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subrounded siltstone. With occasional crystals.		25	35	16	19	CL/CI	98
BH02	10.50	B	Stiff dark brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular and subrounded sandstone.	Sample passed through 425µm sieve	16	35	15	20	CL/CI	93
BH02	18.00	B	Stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular and subrounded quartz.		14	27	14	13	CL	90
BH03	15.00	B	Stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subrounded siltstone and quartz. With crystals.		15	34	14	20	CL	97
WLS01	3.50	D	Soft dark grey brown silty slightly sandy organic CLAY.		26	27	19	8	CLO	99
WLS06	2.50	D	Firm dark grey brown silty CLAY.		25	27	24	3	ML	100
WLS08	2.00	D	Firm grey black sandy slightly gravelly organic CLAY. Gravel consists of fine to coarse subangular and subrounded sandstone.	Sample passed through 425µm sieve	21	23	15	8	CLO	77

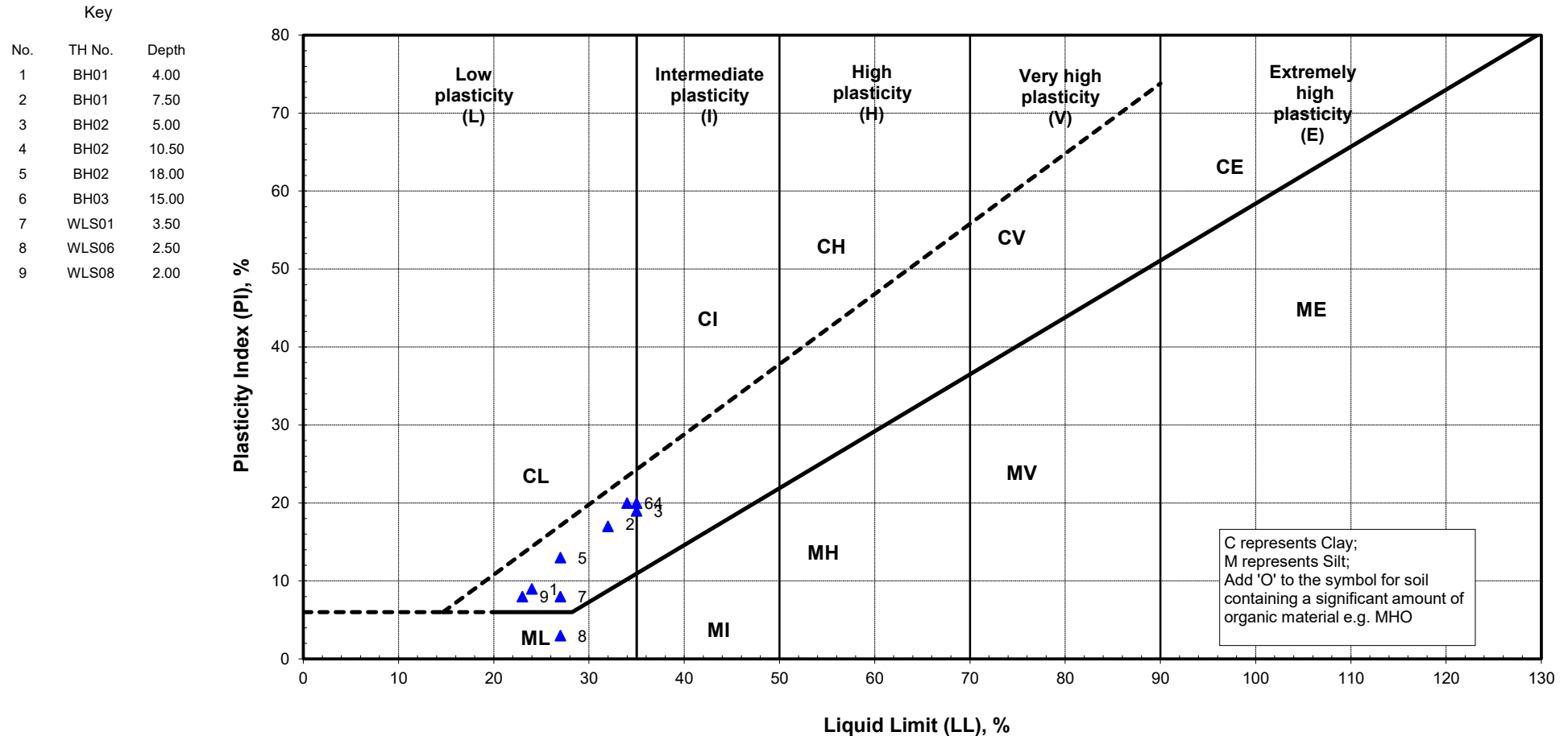
Registered office Southern Testing Laboratories Ltd, Keeble House, Stuart Way, East Grinstead RH19 4QA. Testing carried out at Units 20A & B, Durkins Road, East Grinstead RH19 2RW. BSI Ref: FS29280 under BS EN ISO 9001.

Jun 13

Plasticity Chart for Atterberg Limit Tests



Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	27-Aug-24

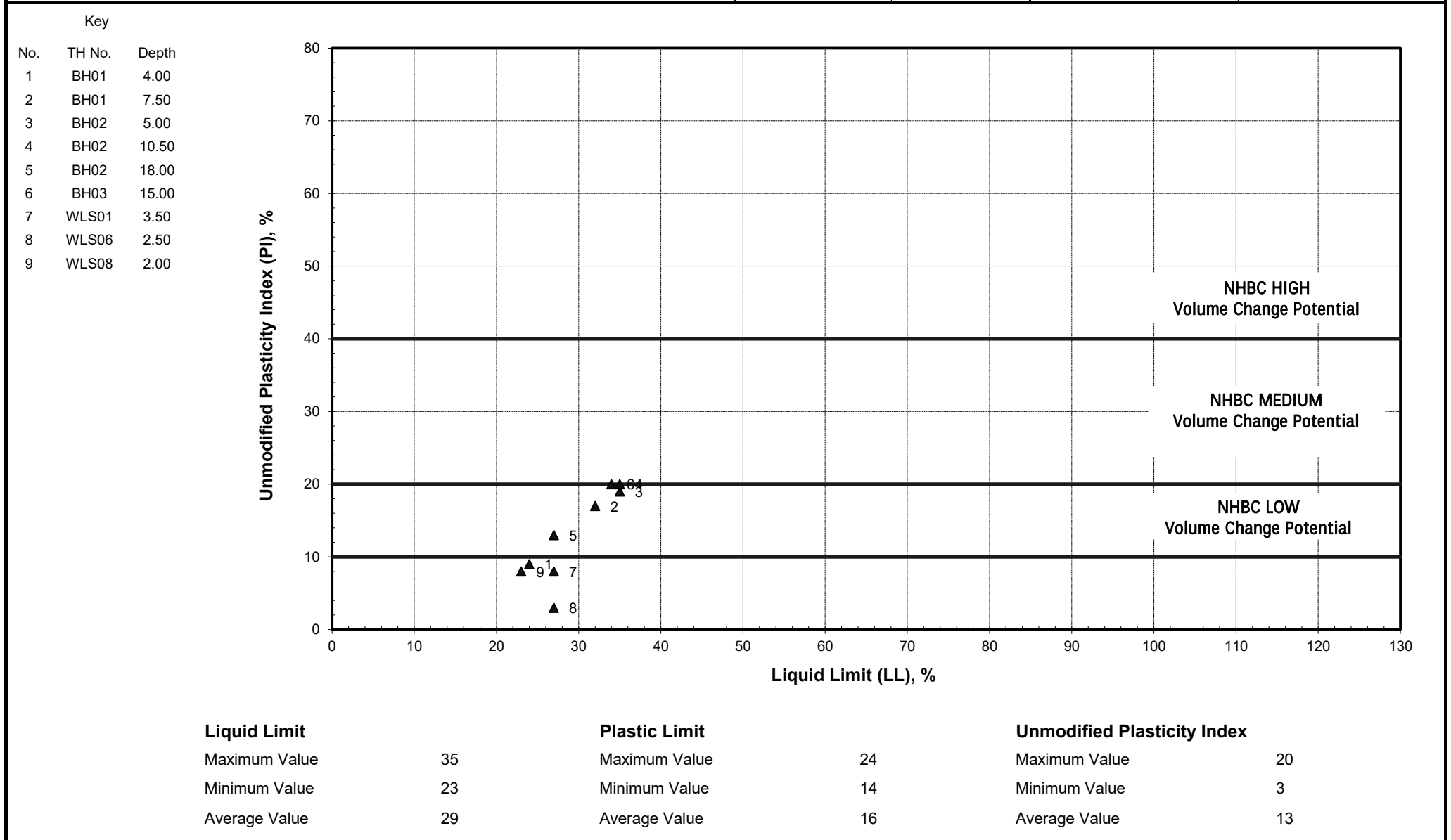


Liquid Limit		Plastic Limit		Plasticity Index	
Maximum Value	35	Maximum Value	24	Maximum Value	20
Minimum Value	23	Minimum Value	14	Minimum Value	3
Average Value	29	Average Value	16	Average Value	13

NHBC Classification for Volume Change Potential



Project Name	Molesworth Street, Rochdale	Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL
		Date Issued	27-Aug-24



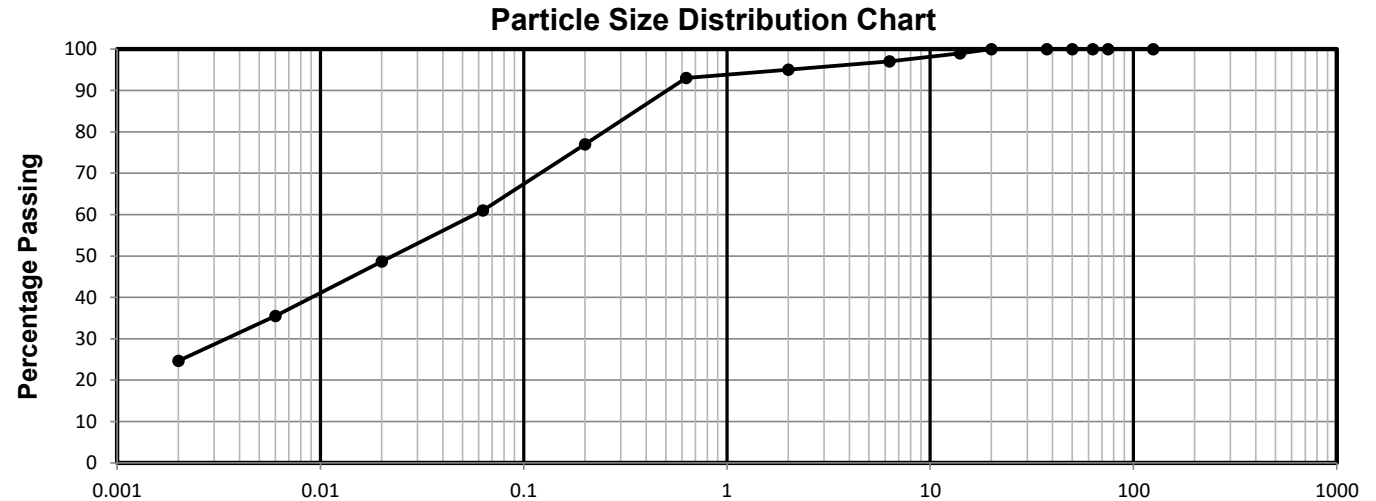
PARTICLE SIZE DISTRIBUTION REPORT

BS EN ISO 17892-4:2016 cl. 5.2, 5.4



Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size	% Passing
125mm	100
75mm	100
63mm	100
50mm	100
37.5mm	100
20mm	100
14mm	99
6.3mm	97
2mm	95
630µm	93
200µm	77
63µm	61
20µm	49
6µm	36
2µm	25



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
25	36			34			5			0

Sedimentation pre-treatment: None

Visual Description of Sample:

Very stiff dark grey brown silty slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular and subrounded sandstone. With occasional fine crystals.

Comments:

Particle Density (Assumed) Mg/m³ 2.70

Coefficient of Uniformity N/A

Test Methods:

Wet & Dry Grading BS EN ISO 17892-4:2016 cl. 5.2
Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location BH02

Depth (m) 7.20

Sample Type B

Tested By STL Lab

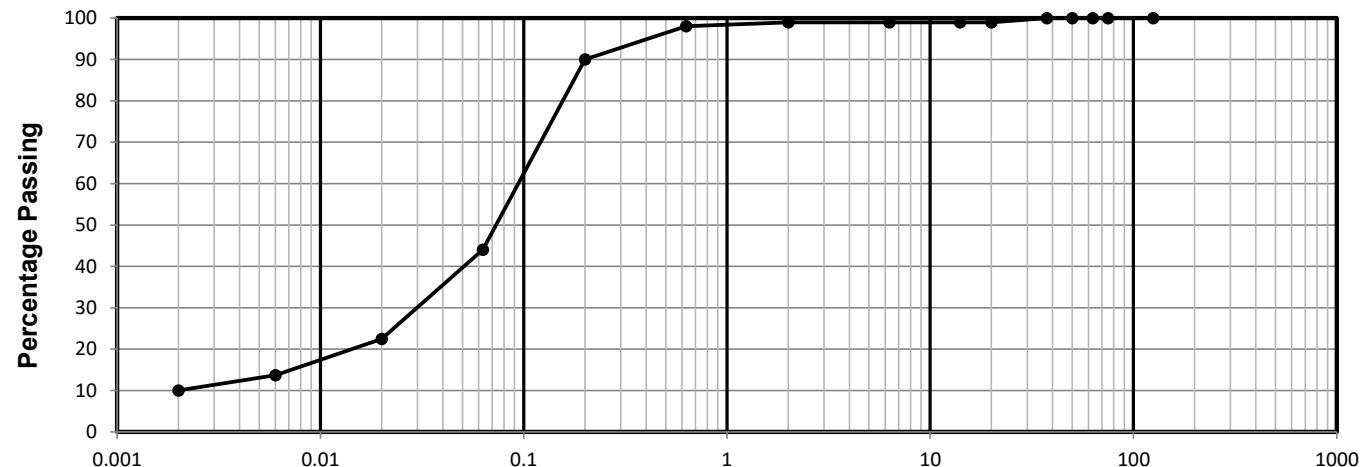
Checked By Timon

PARTICLE SIZE DISTRIBUTION REPORT

BS EN ISO 17892-4:2016 cl. 5.2, 5.4

Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size Distribution Chart



Particle Size	% Passing
125mm	100
75mm	100
63mm	100
50mm	100
37.5mm	100
20mm	99
14mm	99
6.3mm	99
2mm	99
630µm	98
200µm	90
63µm	44
20µm	22
6µm	14
2µm	10

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
10	34			54			1			0

Sedimentation pre-treatment: None

Visual Description of Sample:

Soft dark brown clayey sandy SILT. With occasional fine crystals.

Particle Density (Assumed) Mg/m³ 2.65

Coefficient of Uniformity N/A

Test Methods:

Wet & Dry Grading BS EN ISO 17892-4:2016 cl. 5.2
Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location BH03

Depth (m) 3.00

Sample Type B

Tested By STL Lab

Checked By Timon

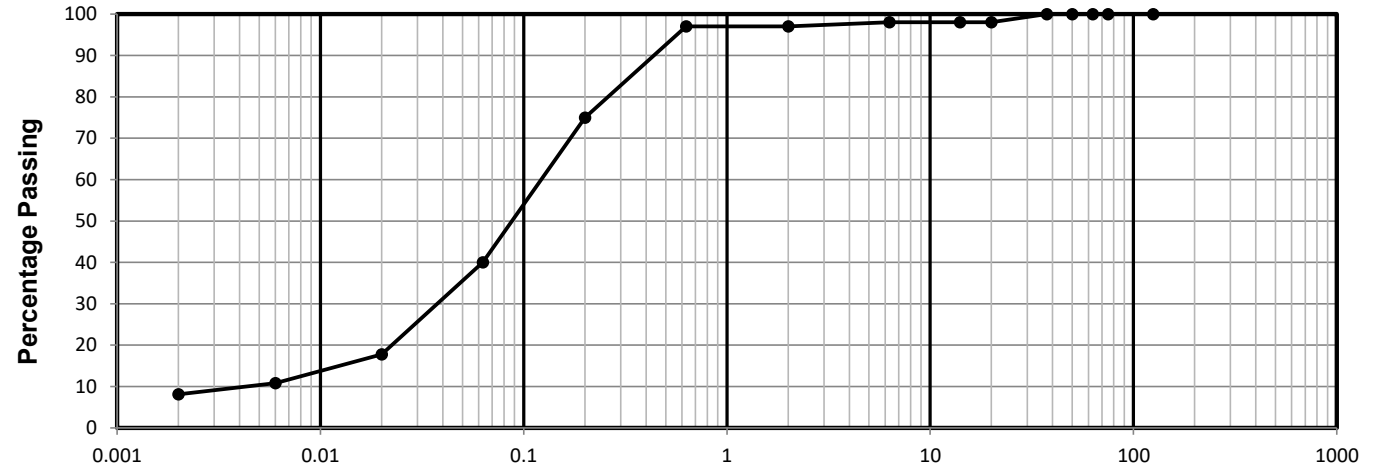
Comments:

PARTICLE SIZE DISTRIBUTION REPORT

BS EN ISO 17892-4:2016 cl. 5.2, 5.4

Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size Distribution Chart



Particle Size	% Passing
125mm	100
75mm	100
63mm	100
50mm	100
37.5mm	100
20mm	98
14mm	98
6.3mm	98
2mm	97
630µm	97
200µm	75
63µm	40
20µm	18
6µm	11
2µm	8

CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
8	32			58			3			0

Sedimentation pre-treatment: None

Visual Description of Sample:

Soft dark brown clayey sandy slightly gravelly SILT. Gravel consists of coarse subangular sandstone. With occasional fine crystals.

Particle Density (Assumed) Mg/m³ 2.65

Coefficient of Uniformity 29

Test Methods:

Wet & Dry Grading BS EN ISO 17892-4:2016 cl. 5.2
Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location BH03

Depth (m) 7.50

Sample Type B

Tested By STL Lab

Checked By Timon

Comments:

PARTICLE SIZE DISTRIBUTION REPORT

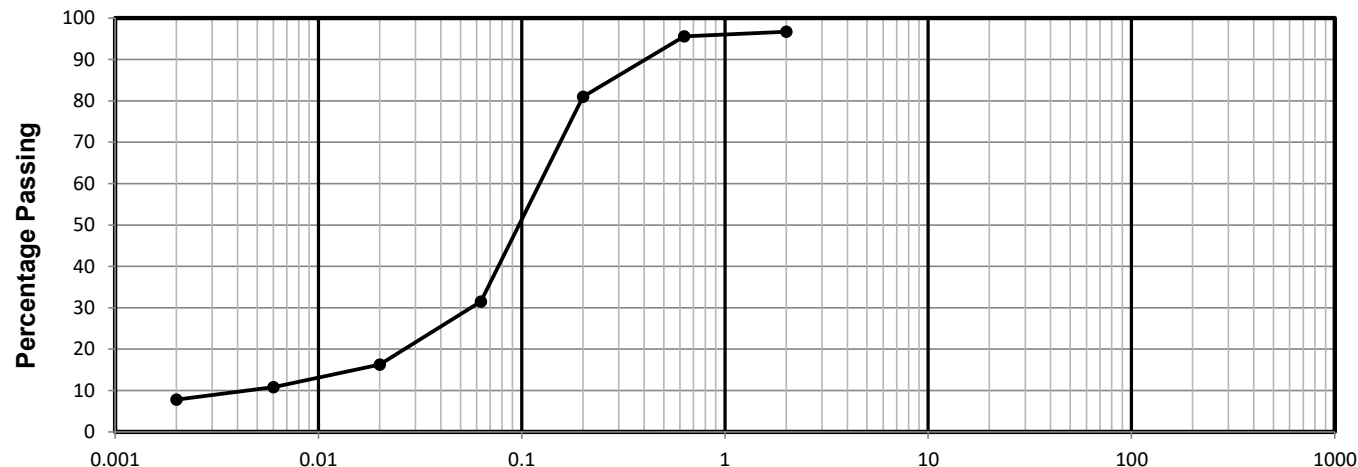
BS EN ISO 17892-4:2016 cl. 5.2, 5.4



Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size Distribution Chart

Particle Size	% Passing
2mm	97
630µm	96
200µm	81
63µm	32
20µm	16
6µm	11
2µm	8



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
8	24			65			3			

Sedimentation pre-treatment: None

Visual Description of Sample:

Soft dark grey brown clayey/silty slightly gravelly organic fine and medium SAND. Gravel consists of fine subangular flint.

Particle Density (Assumed) Mg/m³

2.65

Coefficient of Uniformity

Test Methods:

Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location

WLS02

Depth (m)

5.10

Sample Type

D

Tested By

STL Lab

Checked By

Timon

Comments:

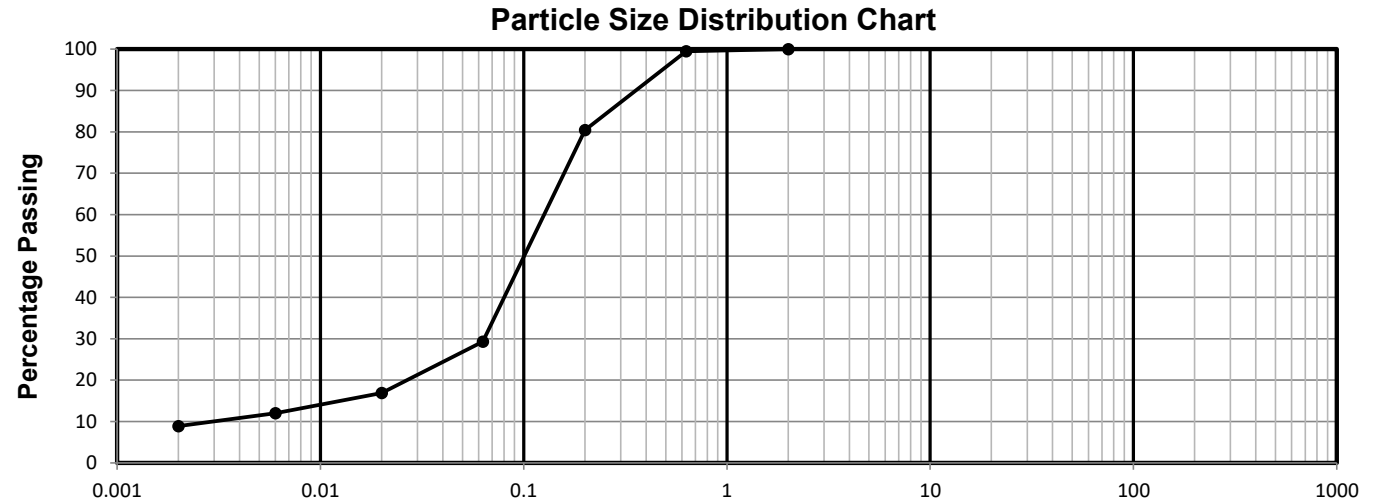
PARTICLE SIZE DISTRIBUTION REPORT

BS EN ISO 17892-4:2016 cl. 5.2, 5.4



Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size	% Passing
2mm	100
630µm	100
200µm	80
63µm	29
20µm	17
6µm	12
2µm	9



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
9	20			71			0			

Sedimentation pre-treatment: None

Visual Description of Sample:

Dark grey brown clayey/silty fine and medium SAND.

Particle Density (Assumed) Mg/m³

2.65

Coefficient of Uniformity

Test Methods:

Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location

WLS05

Depth (m)

1.00

Sample Type

D

Tested By

STL Lab

Checked By

Timon

Comments:

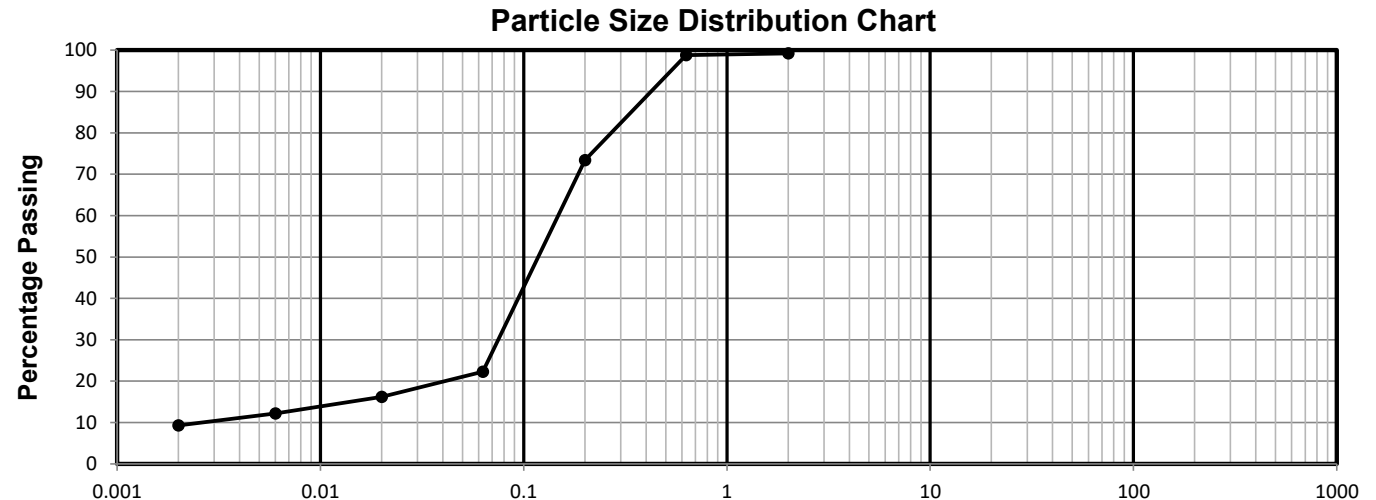
PARTICLE SIZE DISTRIBUTION REPORT

BS EN ISO 17892-4:2016 cl. 5.2, 5.4



Project Name	Molesworth Street, Rochdale			Project Number	J15721
Client Name	Glanville Consultants Limited	PE	CL	Date Issued	28-Aug-24

Particle Size	% Passing
2mm	99
630µm	99
200µm	73
63µm	22
20µm	16
6µm	12
2µm	9



CLAY	Fine	Medium	Coarse	Fine	Medium	Coarse	Fine	Medium	Coarse	COBBLES
	SILT			SAND			GRAVEL			
9	13			77			1			

Sedimentation pre-treatment: None

Visual Description of Sample:

Dark grey brown clayey/silty fine and medium SAND.

Particle Density (Assumed) Mg/m³ 2.65

Coefficient of Uniformity

Test Methods:

Sedimentation by Pipette BS EN ISO 17892-4:2016 cl. 5.4

Location WLS05

Depth (m) 1.50

Sample Type D

Tested By STL Lab

Checked By Timon

Comments:

Project Name			Molesworth Street, Rochdale					Project Number		J15721	
Client			Glanville Consultants Limited			PE	CL	Date Issued		27-Aug-24	
Location ID	Depth (m)	Sample Type	Visual Description	Comments	Test Type	UCS by Hand Pen. (KPa)	WC (%)	Cell Press. (KPa)	Deviator Stress (KPa)	Apparent Cohesion C _u (KPa)	Bulk Density (Mg/m ³)
BH01	9.00	U	Stiff dark grey brown slightly sandy CLAY.		Single Stage	400	15.7	180	274	137	2.10
BH01	12.00	U	Very stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular siltstone.		Single Stage	500	13.2	240	493	247	1.85
BH01	15.00	U	Stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular siltstone.		Single Stage	250	19.4	300	223	112	2.07
BH02	7.50	U	Firm dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular flint.	Insufficient Sample.	Single Stage	140	17.0				
BH02	12.00	U	Stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subrounded sandstone and basalt.		Single Stage	320	15.4	240	340	170	2.11
BH03	10.50	U	Stiff brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subangular and subrounded sandstone and basalt.	Sample Unsuitable.	Single Stage	240	17.1				
BH03	13.50	U	Very stiff dark grey brown slightly sandy slightly gravelly CLAY. Gravel consists of fine and medium subrounded sandstone and granite.		Single Stage	440	13.9	270	208	104	2.16

Registered office Southern Testing Laboratories Ltd, Keeble House, Stuart Way, East Grinstead RH19 4QA. Testing carried out at Units 20A & B, Durkins Road, East Grinstead RH19 2RW. BSI Ref: FS29280 under BS EN ISO 9001.

Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 24-035307

Project / Site name:	Molesworth Street Rochdale	Samples received on:	08/08/2024
Your job number:	J15721	Samples instructed on / Analysis started on:	08/08/2024
Your order number:	J15721-3	Analysis completed by:	15/08/2024
Report Issue Number:	1	Report issued on:	15/08/2024
Samples Analysed:	13 soil samples		

Signed: _____



Rafał Szczepańczyk
Technical Reviewer
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-035307
 Project / Site name: Molesworth Street Rochdale
 Your Order No: J15721-3

Lab Sample Number	281692	281693	281694	281695	281696
Sample Reference	BH01	BH01	BH02	BH02	BH03
Sample Number	ES	ES	ES	ES	ES
Depth (m)	9.50	15.50	8.00	12.50	11.00
Date Sampled	22/07/2024	23/07/2024	24/07/2024	24/07/2024	25/07/2024
Time Taken	1200	1200	1200	1200	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	14	12	13	14
Total mass of sample received	kg	0.1	NONE	1	0.5	1	0.5	0.5

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.4	8.5	8.5	8.4	8.5
Total Sulphate as SO ₄	%	0.005	MCERTS	0.042	0.033	0.025	0.035	0.03
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	190	150	97	230	150
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	95.2	75	48.5	113	75.7
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	-
Total Sulphur	mg/kg	50	MCERTS	630	700	750	1100	700
Total Sulphur	%	0.005	MCERTS	0.063	0.07	0.075	0.108	0.07
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	-
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	-

Heavy Metals / Metalloids

Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	-
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-035307
 Project / Site name: Molesworth Street Rochdale
 Your Order No: J15721-3

Lab Sample Number	281697	281698	281699	281700	281701
Sample Reference	BH03	WLS01	WLS02	WLS05	WLS08
Sample Number	ES	D	D	D	ES
Depth (m)	14.00	2.50	4.00-5.00	2.50	0.40
Date Sampled	26/07/2024	29/07/2024	29/07/2024	30/07/2027	31/07/2024
Time Taken	1200	1200	1400	1130	1000
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	12	7.9	21	16	15
Total mass of sample received	kg	0.1	NONE	0.5	0.8	0.4	1.5	1

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.5	7.5	7.8	7.6	7.8
Total Sulphate as SO ₄	%	0.005	MCERTS	0.032	0.021	0.068	0.007	0.033
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	140	130	600	44	95
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	70.8	64	300	21.8	47.6
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	-	-	-	-	4.3
Total Sulphur	mg/kg	50	MCERTS	580	380	1600	70	380
Total Sulphur	%	0.005	MCERTS	0.058	0.038	0.159	0.007	0.038
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	-	-	-	-	< 2.0
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	-	-	-	-	< 2.0

Heavy Metals / Metalloids

Magnesium (leachate equivalent)	mg/l	2.5	NONE	-	-	-	-	< 2.5
Magnesium (water soluble)	mg/kg	5	NONE	-	-	-	-	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-035307
 Project / Site name: Molesworth Street Rochdale
 Your Order No: J15721-3

Lab Sample Number	281702	281703	281704
Sample Reference	WLS08	WLS09	WLS09
Sample Number	ES	ES	ES
Depth (m)	1.20	0.30	1.00
Date Sampled	31/07/2024	31/07/2024	31/07/2024
Time Taken	1000	1200	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	75.3	< 0.1
Moisture Content	%	0.01	NONE	17	4.6	12
Total mass of sample received	kg	0.1	NONE	1	1	1

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	7.3	8.6	10.4
Total Sulphate as SO ₄	%	0.005	MCERTS	0.055	0.016	0.119
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	370	37	580
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	186	18.6	290
Water Soluble Chloride (2:1) (leachate equivalent)	mg/l	0.5	MCERTS	7.8	1.9	69
Total Sulphur	mg/kg	50	MCERTS	840	180	620
Total Sulphur	%	0.005	MCERTS	0.084	0.018	0.062
Water Soluble Nitrate (2:1) as N	mg/kg	2	NONE	< 2.0	< 2.0	11
Water Soluble Nitrate (2:1) as N (leachate equivalent)	mg/l	2	NONE	< 2.0	< 2.0	6.3

Heavy Metals / Metalloids

Magnesium (leachate equivalent)	mg/l	2.5	NONE	7.8	< 2.5	< 2.5
Magnesium (water soluble)	mg/kg	5	NONE	16	< 5.0	< 5.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 24-035307

Project / Site name: Molesworth Street Rochdale

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
281692	BH01	ES	9.5	Brown clay with gravel and vegetation
281693	BH01	ES	15.5	Brown clay with gravel
281694	BH02	ES	8	Brown clay with gravel
281695	BH02	ES	12.5	Brown clay with gravel
281696	BH03	ES	11	Brown clay with gravel
281697	BH03	ES	14	Brown clay with gravel
281698	WLS01	D	2.5	Brown sandy clay
281699	WLS02	D	4.00-5.00	Brown sandy clay
281700	WLS05	D	2.5	Brown sandy clay
281701	WLS08	ES	0.4	Brown loam and clay
281702	WLS08	ES	1.2	Brown loam and clay
281703	WLS09	ES	0.3	Brown loam with stones
281704	WLS09	ES	1	Brown loam and gravel with brick

Analytical Report Number : 24-035307
Project / Site name: Molesworth Street Rochdale

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Magnesium, water soluble, in soil	Determination of water soluble magnesium by extraction with water followed by ICP-OES	In-house method based on TRL 447	L038B	D	NONE
Total sulphate (as SO ₄ in soil)	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES	In-house method	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Total Sulphur in soil	Determination of total sulphur in soil by extraction with aqua-regia, potassium bromide/bromate followed by ICP-OES	In-house method	L038B	D	MCERTS
Water Soluble Nitrate (2:1) as N in soil	Determination of nitrate by reaction with sodium salicylate and colorimetry	In-house method based on Examination of Water and Wastewater & Polish Standard Method PN-82/C-04579.08, 2:1 extraction	L078B	W	NONE
Chloride, water soluble, in soil	Determination of Chloride colorimetrically by discrete analyser	In-house method	L082B	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

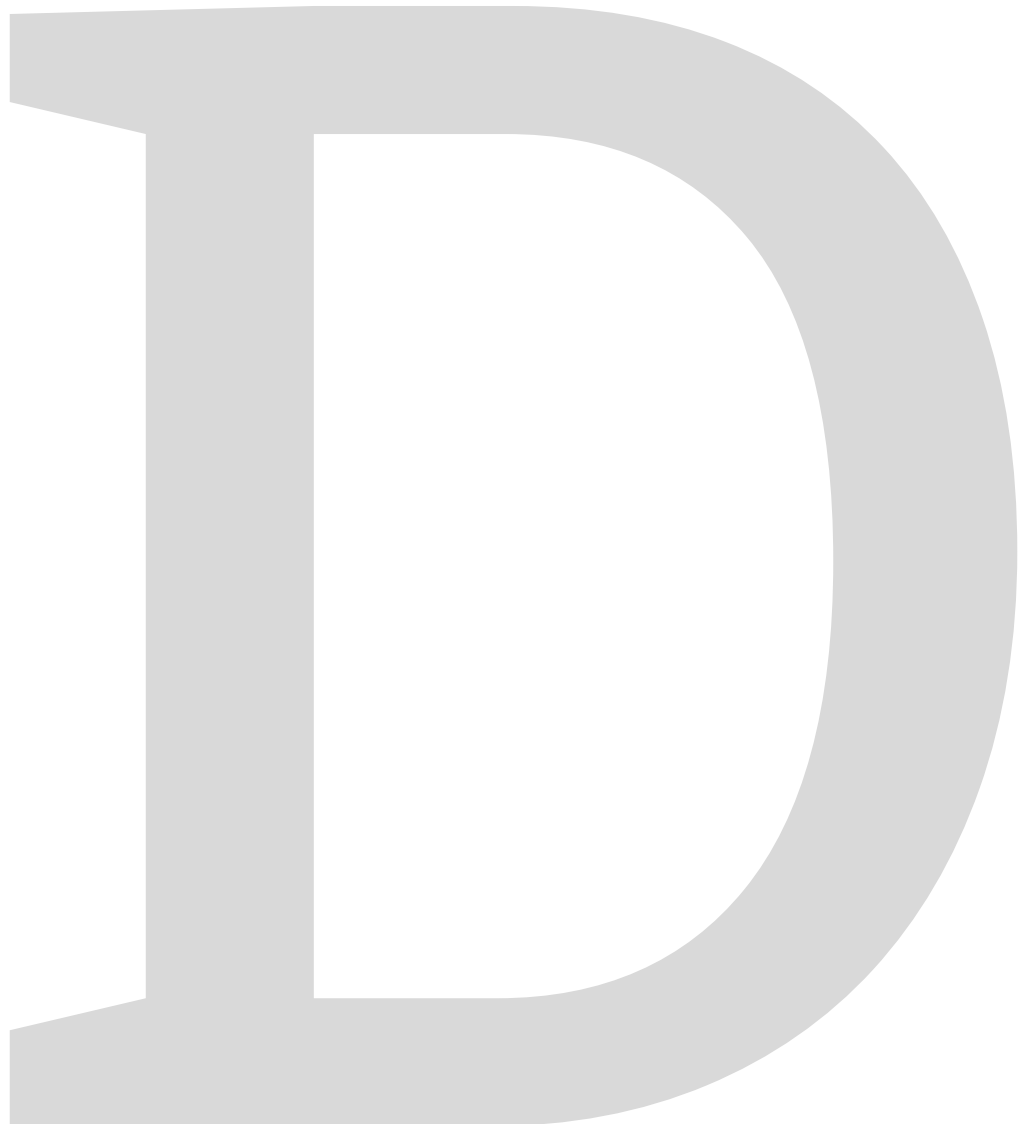
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

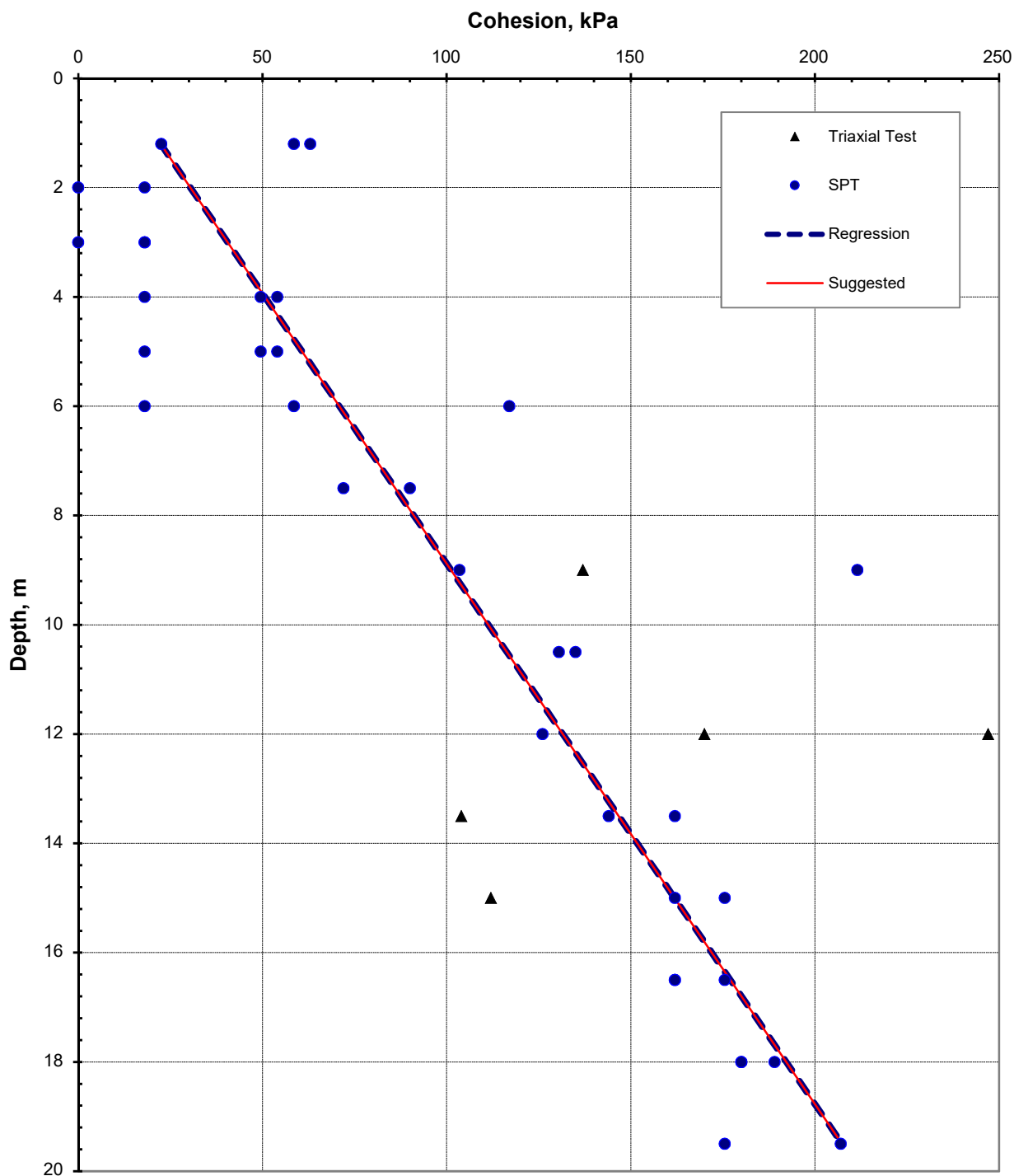
The result for sum should be interpreted with caution

APPENDIX D

**Geotechnical Figures and
Tables**



Plot of Cohesion vs Depth



Linear Regression of the Test Results:
Suggested Design Line:

Slope = 10.1 kPa/m, Zero intercept = 10.2 kPa
Slope = 10.1 kPa/m, Zero intercept = 10.2 kPa

Client: Glanville Consultants Ltd.

Site: Molesworth Street, Rochdale

Job No: J15721

Date: 13/09/2024

Figure No: P1

APPENDIX E

Contamination Laboratory Test Methods and Results



These screening values are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based on them. Their validity should be confirmed at the time of site development.

Table 1 – Tier 1 Screening Values							
Contaminant	Units	Proposed Land Use					
		Residential with home grown produce consumption	Residential without home grown produce consumption	Open Space * (Residential)	Open Space * (Park)	Allotments	Commercial / Industrial
Arsenic (As) [2]	mg/kg	37	40	79	170	43	640
Cadmium (Cd) [2]	mg/kg	11	85	120	555	1.9	190
Trivalent Chromium (CrIII) [2]	mg/kg	910	910	1,500	33,000	18,000	8600
Hexavalent Chromium (CrVI) [2]	mg/kg	6	6	7.7	220	1.8	33
Lead (Pb) [3]	mg/kg	200	310	630	1300	80	2330
Mercury (Hg) [1,2,7]	mg/kg	7.6-11	9.2-15	40	68-71	6.0	29-320
Selenium (Se) [2]	mg/kg	250	430	1,100	1,800	88	12,000
Nickel (Ni) [2,4]	mg/kg	130	180	230	800	53	980
Copper (Cu) [2,4]	mg/kg	2,400	7,100	12,000	44,000	520	68,000
Zinc (Zn) [2,4]	mg/kg	3,700	40,000	81,000	170,000	620	730,000
Phenol [1,2]	mg/kg	120-380	440-1200	440-1300	440-1300	23-83	440-1300
Benzo[a]pyrene [1,5]	mg/kg	1.7-2.4	2.6	4.9	10	0.67-2.7	36
Naphthalene [1,2]	mg/kg	2.3-13	2.3-13	77-430*	77-430*	4.1-24	77-430*
Total Cyanide (CN) [6]	mg/kg	/	/	/	/	/	/
Free Cyanide [6]	mg/kg	/	/	/	/	/	/
Complex Cyanides [6]	mg/kg	/	/	/	/	/	/
Thiocyanate [6]	mg/kg	/	/	/	/	/	/

Notes:

* Open Space levels calculated on the basis of the exposure modelling developed in the C4SL research.

+ Screening values constrained to saturation limit. Higher values may be acceptable on a site specific basis.

[1] Where ranges of values are given for organic contaminants the screening value is dependent on the Soil +Organic Matter.

[2] LQM/CIEH S4UL (2014). Copyright Land Quality Management Ltd. reproduced with permission; Publication Number S4UL 3116. All rights reserved.

[3] C4SL (DEFRA 2014).

[4] Copper, Zinc and Nickel may have phototoxic effects at the given concentrations. Alternative criteria should be adopted for importation of Topsoil or other soils for cultivation. BS3882:2015 and BS8601:2013 suggest values of 200 to 300mg/kg for Zn, 100 to 200mg/kg for Cu, and 60 to 110mg/kg for Ni, for topsoil and subsoil, depending on pH.

[5] Based on the Surrogate Marker approach and modelled using the modified exposure parameters of C4SL but retaining 'minimal risk' HCV.

[6] Screening criteria derived on a site specific basis if test results indicate.

[7] S4UL for Methyl Mercury, higher concentrations may be tolerable if inorganic mercury is the only species present. Lower concentrations apply for elemental Mercury.

Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 24-032841

Replaces Analytical Report Number: 24-032841, issue no. 1

Additional analysis undertaken.

Asbestos Quantification added to sample 268842 as per client's request.

Project / Site name:	McDonalds Restaurant Molesworth Street	Samples received on:	25/07/2024
Your job number:	J15721	Samples instructed on / Analysis started on:	25/07/2024
Your order number:		Analysis completed by:	09/08/2024
Report Issue Number:	2	Report issued on:	12/08/2024
Samples Analysed:	5 soil samples		

Signed: 

Trevor Hill
Customer Service Advisor
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	268842	268843	268845	268847	268848
Sample Reference	BH01	BH01	BH02	BH03	BH03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50-1.00	1.80-3.00	2.50-3.00	1.00-2.00	7.00
Date Sampled	22/07/2024	22/07/2024	23/07/2024	25/07/2024	25/07/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	8.4	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	8.9	17	18	7.5	13
Total mass of sample received	kg	0.1	NONE	1.3	1.4	1.3	1.4	1.3

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	EWS	MUA	KJK	KJK	KJK
Actinolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	Detected	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	-	-	-	-
-------------------------------------	---	-------	-----------	---------	---	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	-	-	-	-
---	------	-----	-----------	--------------	---	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.8	8.3	7.7	10.5	8.5
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	240	36	610	170	79
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.12	0.018	0.304	0.0869	0.0397
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	120	18	304	86.9	39.7
Sulphide	mg/kg	1	MCERTS	8.7	1.3	14	1.2	13
Organic Matter (automated)	%	0.1	MCERTS	3.3	1.5	4.3	4.5	1.6

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.1	< 0.05	0.87	0.18	0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	0.16	< 0.05	0.11	< 0.05	< 0.05
Fluorene	mg/kg	0.05	MCERTS	0.08	< 0.05	0.09	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	0.82	0.26	1.2	0.34	0.11
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	0.2	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	1.2	0.32	1.6	0.39	< 0.05
Pyrene	mg/kg	0.05	MCERTS	1.1	0.29	1.3	0.42	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.44	0.09	0.54	0.18	< 0.05
Chrysene	mg/kg	0.05	MCERTS	0.7	0.16	0.68	0.33	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.59	0.12	0.67	0.22	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.3	< 0.05	0.29	0.08	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.48	0.12	0.54	0.21	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.25	0.05	0.32	0.09	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.34	0.1	0.4	0.13	< 0.05

Analytical Report Number: 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	268842	268843	268845	268847	268848
Sample Reference	BH01	BH01	BH02	BH03	BH03
Sample Number	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50-1.00	1.80-3.00	2.50-3.00	1.00-2.00	7.00
Date Sampled	22/07/2024	22/07/2024	23/07/2024	25/07/2024	25/07/2024
Time Taken	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	6.45	1.51	8.81	2.55	< 0.80
-----------------------------	-------	-----	-----------	------	------	------	------	--------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	18	3.2	13	3.4	6.7
Boron (water soluble)	mg/kg	0.2	MCERTS	0.2	-	-	-	< 0.2
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	19	15	18	16	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	57	21	65	16	18
Lead (aqua regia extractable)	mg/kg	1	MCERTS	92	15	82	9.2	10
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	21	27	13	26
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	31	-	-	-	22
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	130	53	58	42	57

Petroleum Hydrocarbons

TPHCWG - Aliphatic >EC5 - EC6 _{HS 1D_AL}	mg/kg	0.01	MCERTS	-	-	< 0.010	-	-
TPHCWG - Aliphatic >EC6 - EC8 _{HS 1D_AL}	mg/kg	0.01	MCERTS	-	-	< 0.010	-	-
TPHCWG - Aliphatic >EC8 - EC10 _{HS 1D_AL}	mg/kg	0.01	MCERTS	-	-	0.43	-	-
TPHCWG - Aliphatic >EC10 - EC12 _{EH_CU 1D_AL}	mg/kg	1	MCERTS	-	-	31	-	-
TPHCWG - Aliphatic >EC12 - EC16 _{EH_CU 1D_AL}	mg/kg	2	MCERTS	-	-	160	-	-
TPHCWG - Aliphatic >EC16 - EC21 _{EH_CU 1D_AL}	mg/kg	8	MCERTS	-	-	8.6	-	-
TPHCWG - Aliphatic >EC21 - EC35 _{EH_CU 1D_AL}	mg/kg	8	MCERTS	-	-	< 8.0	-	-
TPHCWG - Aliphatic >EC5 - EC35 _{EH_CU+HS 1D_AL}	mg/kg	10	NONE	-	-	200	-	-

TPHCWG - Aromatic >EC5 - EC7 _{HS 1D_AR}	mg/kg	0.01	MCERTS	-	-	< 0.010	-	-
TPHCWG - Aromatic >EC7 - EC8 _{HS 1D_AR}	mg/kg	0.01	MCERTS	-	-	< 0.010	-	-
TPHCWG - Aromatic >EC8 - EC10 _{HS 1D_AR}	mg/kg	0.02	MCERTS	-	-	< 0.020	-	-
TPHCWG - Aromatic >EC10 - EC12 _{EH_CU 1D_AR}	mg/kg	1	MCERTS	-	-	9	-	-
TPHCWG - Aromatic >EC12 - EC16 _{EH_CU 1D_AR}	mg/kg	2	MCERTS	-	-	42	-	-
TPHCWG - Aromatic >EC16 - EC21 _{EH_CU 1D_AR}	mg/kg	10	MCERTS	-	-	< 10	-	-
TPHCWG - Aromatic >EC21 - EC35 _{EH_CU 1D_AR}	mg/kg	10	MCERTS	-	-	< 10	-	-
TPHCWG - Aromatic >EC5 - EC35 _{EH_CU+HS 1D_AR}	mg/kg	10	NONE	-	-	51	-	-

TPH (>EC6 - EC8) _{HS 1D_TOTAL}	mg/kg	0.01	MCERTS	-	-	-	< 0.01	-
TPH (>EC8 - EC10) _{HS 1D_TOTAL}	mg/kg	0.02	MCERTS	-	-	-	< 0.02	-
TPH (>EC10 - EC12) _{EH_CU 1D_TOTAL}	mg/kg	2	MCERTS	-	-	-	< 2.0	-
TPH (>EC12 - EC16) _{EH_CU 1D_TOTAL}	mg/kg	4	MCERTS	-	-	-	8	-
TPH (>EC16 - EC21) _{EH_CU 1D_TOTAL}	mg/kg	10	MCERTS	-	-	-	69	-
TPH (>EC21 - EC40) _{EH_CU 1D_TOTAL}	mg/kg	10	MCERTS	-	-	-	1800	-

TPH Total >EC6 - EC40 _{EH_CU+HS 1D_TOTAL}	mg/kg	10	NONE	1200	-	-	1900	< 10
--	-------	----	------	------	---	---	------	------

Petroleum Range Organics (EC6 - EC10) _{HS 1D_TOTAL}	mg/kg	1	ISO 17025	< 1.0	-	-	< 1.0	< 1.0
TPH (EC10 - EC40) _{EH_CU 1D_TOTAL}	mg/kg	10	MCERTS	1200	-	-	1900	< 10

Analytical Report Number: 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	268842				268843	268845	268847	268848
Sample Reference	BH01				BH01	BH02	BH03	BH03
Sample Number	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)	0.50-1.00				1.80-3.00	2.50-3.00	1.00-2.00	7.00
Date Sampled	22/07/2024				22/07/2024	23/07/2024	25/07/2024	25/07/2024
Time Taken	None Supplied				None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					

VOCS

Chloromethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Chloroethane	µg/kg	5	NONE	-	-	< 5.0	-	-
Bromomethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Vinyl Chloride	µg/kg	5	NONE	-	-	< 5.0	-	-
Trichlorofluoromethane	µg/kg	5	NONE	-	-	< 5.0	-	-
1,1-Dichloroethene	µg/kg	5	NONE	-	-	< 5.0	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	-	-	< 5.0	-	-
Trans 1,2-dichloroethylene	µg/kg	5	NONE	-	-	< 5.0	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	< 5.0	-	-
1,1-Dichloroethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
2,2-Dichloropropane	µg/kg	5	NONE	-	-	< 5.0	-	-
Chloroform	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,2-Dichloroethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,1-Dichloropropene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Benzene	µg/kg	5	MCERTS	-	-	< 5.0	-	-
Carbontetrachloride	µg/kg	5	NONE	-	-	< 5.0	-	-
1,2-Dichloropropane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Trichloroethene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Dibromomethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Bromodichloromethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Toluene	µg/kg	5	MCERTS	-	-	< 5.0	-	-
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,3-Dichloropropane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Dibromochloromethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Tetrachloroethene	µg/kg	5	NONE	-	-	< 5.0	-	-
1,2-Dibromoethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Chlorobenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	< 5.0	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	< 5.0	-	-
Styrene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
Bromoform	µg/kg	5	NONE	-	-	< 5.0	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	< 5.0	-	-
Isopropylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	-	-	< 5.0	-	-
Bromobenzene	µg/kg	5	NONE	-	-	< 5.0	-	-
n-Propylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
2-Chlorotoluene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
4-Chlorotoluene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
tert-Butylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
sec-Butylbenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
p-Isopropyltoluene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	< 5.0	-	-

Analytical Report Number: 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				268842	268843	268845	268847	268848
Sample Reference				BH01	BH01	BH02	BH03	BH03
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.50-1.00	1.80-3.00	2.50-3.00	1.00-2.00	7.00
Date Sampled				22/07/2024	22/07/2024	23/07/2024	25/07/2024	25/07/2024
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)				Units	Test Limit of detection	Test Accreditation Status		
Butylbenzene				µg/kg	5	NONE	-	-
1,2-Dibromo-3-chloropropane				µg/kg	5	ISO 17025	-	-
1,2,4-Trichlorobenzene				µg/kg	5	ISO 17025	-	-
Hexachlorobutadiene				µg/kg	5	NONE	-	-
1,2,3-Trichlorobenzene				µg/kg	5	ISO 17025	-	-

SVOCS

Aniline	mg/kg	0.1	NONE	-	-	< 0.1	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	< 0.2	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Hexachloroethane	mg/kg	0.05	ISO 17025	-	-	< 0.05	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
2-Nitrophenol	mg/kg	0.3	NONE	-	-	< 0.3	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	< 0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	< 0.1	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	-	-	< 0.1	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	-	-	< 0.2	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	0.8	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	< 0.1	-	-
2,6-Dinitrotoluene	mg/kg	0.1	NONE	-	-	< 0.1	-	-
2,4-Dinitrotoluene	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
4-Nitroaniline	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Azobenzene	mg/kg	0.3	NONE	-	-	< 0.3	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	< 0.2	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	< 0.30	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	< 0.3	-	-
Dibutyl phthalate	mg/kg	0.2	NONE	-	-	< 0.2	-	-
Anthraquinone	mg/kg	0.3	NONE	-	-	< 0.3	-	-
Butyl benzyl phthalate	mg/kg	0.3	NONE	-	-	< 0.3	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 24-032841
Project / Site name: McDonalds Restaurant Molesworth Street
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/ weighing (%)	Total % Asbestos in Sample
268842	BH01	0.50-1.00	140	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
268842	BH01	None Supplied	0.50-1.00	Brown loam and gravel with clinker and vegetation
268843	BH01	None Supplied	1.80-3.00	Light grey sandy clay
268845	BH02	None Supplied	2.50-3.00	Brown clay and sand with gravel
268847	BH03	None Supplied	1.00-2.00	Brown loam and sand with gravel and tar
268848	BH03	None Supplied	7	Brown clay

Analytical Report Number : 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons with carbon banding by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L076B/L088	D/W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS

Analytical Report Number : 24-032841

Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk
vfrancis@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-034156

Replaces Analytical Report Number: 24-034156, issue no. 1

Additional analysis undertaken.

Asbestos Quantification added on sample 275866 as per client's request.

Project / Site name:	McDonalds Restaurant Molesworth Street	Samples received on:	30/07/2024
Your job number:	J15721	Samples instructed on/ Analysis started on:	02/08/2024
Your order number:		Analysis completed by:	16/08/2024
Report Issue Number:	2	Report issued on:	19/08/2024
Samples Analysed:	8 soil samples		

Signed: 

Adan Cazas Garcia
Key Account Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	275866	275867	275868	275869	275870
Sample Reference	WLS01	WLS01	WLS02	WLS02	WLS03
Sample Number	ES	ES	ES	ES	ES
Depth (m)	0.20	1.00	0.40	3.50	0.60
Date Sampled	29/07/2024	29/07/2024	29/07/2024	29/07/2024	29/07/2024
Time Taken	1200	1200	1400	1400	1700
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Stone Content	%	0.1	NONE	< 0.1	< 0.1	84.9	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	7	14	7.4	15	7.4
Total mass of sample received	kg	0.1	NONE	1.5	1.4	1.4	1.4	1.5

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	DSA	PKU	PKU	PKU	PKU
Actinolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Amosite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	Detected	-	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-
Tremolite detected	Type	N/A	ISO 17025	Not-detected	-	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	< 0.001	-	-	-	-
-------------------------------------	---	-------	-----------	---------	---	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	Loose Fibres	-	-	-	-
---	------	-----	-----------	--------------	---	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	10.8	8.7	8.4	8.3	11
Total Cyanide	mg/kg	1	MCERTS	< 1.0	3.4	1.1	2.7	< 1.0
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	300	140	45	130	410
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.15	0.0715	0.0223	0.0666	0.204
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	150	71.5	22.3	66.6	204
Sulphide	mg/kg	1	MCERTS	5.9	4.7	1	< 1.0	5.1
Organic Matter (automated)	%	0.1	MCERTS	2.4	4	0.6	1.5	2.9
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1.4	-	0.3	0.9	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
----------------------------	-------	---	--------	-------	-------	-------	-------	-------

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	275866	275867	275868	275869	275870
Sample Reference	WLS01	WLS01	WLS02	WLS02	WLS03
Sample Number	ES	ES	ES	ES	ES
Depth (m)	0.20	1.00	0.40	3.50	0.60
Date Sampled	29/07/2024	29/07/2024	29/07/2024	29/07/2024	29/07/2024
Time Taken	1200	1200	1400	1400	1700
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.11	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.14
Fluorene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.1
Phenanthrene	mg/kg	0.05	MCERTS	0.24	0.18	0.07	0.16	1.3
Anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.27
Fluoranthene	mg/kg	0.05	MCERTS	0.29	0.13	0.11	0.15	1.7
Pyrene	mg/kg	0.05	MCERTS	0.31	0.13	0.09	0.15	1.6
Benzo(a)anthracene	mg/kg	0.05	MCERTS	0.13	0.08	< 0.05	< 0.05	0.69
Chrysene	mg/kg	0.05	MCERTS	0.19	0.11	< 0.05	0.08	0.85
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	0.21	< 0.05	< 0.05	< 0.05	1
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	0.06	< 0.05	< 0.05	< 0.05	0.32
Benzo(a)pyrene	mg/kg	0.05	MCERTS	0.17	< 0.05	< 0.05	< 0.05	0.79
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	0.13	< 0.05	< 0.05	< 0.05	0.43
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	< 0.05	< 0.05	0.13
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	0.15	< 0.05	< 0.05	< 0.05	0.49

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	1.98	< 0.80	< 0.80	< 0.80	9.81
-----------------------------	-------	-----	-----------	------	--------	--------	--------	------

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	8.9	26	5.6	9.3	12
Boron (water soluble)	mg/kg	0.2	MCERTS	-	-	-	0.5	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.6	1.7	0.3	0.3	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	15	18	22	24	21
Copper (aqua regia extractable)	mg/kg	1	MCERTS	42	2200	13	33	50
Lead (aqua regia extractable)	mg/kg	1	MCERTS	64	240	18	53	43
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	2.8
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	14	33	23	30	25
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1.3	< 1.0	1.1	1.2
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	-	-	-	27	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	120	970	62	70	110

Petroleum Hydrocarbons

TPH (>EC6 - EC8) HS_1D_TOTAL	mg/kg	0.01	MCERTS	-	< 0.01	< 0.01	-	-
TPH (>EC8 - EC10) HS_1D_TOTAL	mg/kg	0.02	MCERTS	-	< 0.02	< 0.02	-	-
TPH (>EC10 - EC12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	-	< 2.0	< 2.0	-	-
TPH (>EC12 - EC16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	-	< 4.0	11	-	-
TPH (>EC16 - EC21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	< 10	26	-	-
TPH (>EC21 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	48	44	-	-

TPH Total >EC6 - EC40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	-	54	82	19	-
---	-------	----	------	---	----	----	----	---

Petroleum Range Organics (EC6 - EC10) HS_1D_TOTAL	mg/kg	1	ISO 17025	-	< 1.0	< 1.0	< 1.0	-
TPH (EC10 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	54	82	19	-

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	275866	275867	275868	275869	275870
Sample Reference	WLS01	WLS01	WLS02	WLS02	WLS03
Sample Number	ES	ES	ES	ES	ES
Depth (m)	0.20	1.00	0.40	3.50	0.60
Date Sampled	29/07/2024	29/07/2024	29/07/2024	29/07/2024	29/07/2024
Time Taken	1200	1200	1400	1400	1700
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status		

VOCs

Chloromethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Chloroethane	µg/kg	5	NONE	-	< 5.0	-	-	-
Bromomethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Vinyl Chloride	µg/kg	5	NONE	-	< 5.0	-	-	-
Trichlorofluoromethane	µg/kg	5	NONE	-	< 5.0	-	-	-
1,1-Dichloroethene	µg/kg	5	NONE	-	< 5.0	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	-	< 5.0	-	-	-
Trans 1,2-dichloroethylene	µg/kg	5	NONE	-	< 5.0	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	< 5.0	-	-	-
1,1-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
2,2-Dichloropropane	µg/kg	5	NONE	-	< 5.0	-	-	-
Chloroform	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,2-Dichloroethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,1-Dichloropropene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Benzene	µg/kg	5	MCERTS	-	< 5.0	-	-	-
Carbon tetrachloride	µg/kg	5	NONE	-	< 5.0	-	-	-
1,2-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Trichloroethene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Dibromomethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Bromodichloromethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Toluene	µg/kg	5	MCERTS	-	< 5.0	-	-	-
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,3-Dichloropropane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Dibromochloromethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Tetrachloroethene	µg/kg	5	NONE	-	< 5.0	-	-	-
1,2-Dibromoethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Chlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	< 5.0	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	-	-
Styrene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Bromoform	µg/kg	5	NONE	-	< 5.0	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	< 5.0	-	-	-
Isopropylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	-	< 5.0	-	-	-
Bromobenzene	µg/kg	5	NONE	-	< 5.0	-	-	-
n-Propylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
2-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
4-Chlorotoluene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
tert-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
sec-Butylbenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
p-Isopropyltoluene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				275866	275867	275868	275869	275870
Sample Reference				WLS01	WLS01	WLS02	WLS02	WLS03
Sample Number				ES	ES	ES	ES	ES
Depth (m)				0.20	1.00	0.40	3.50	0.60
Date Sampled				29/07/2024	29/07/2024	29/07/2024	29/07/2024	29/07/2024
Time Taken				1200	1200	1400	1400	1700
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status					
Butylbenzene	µg/kg	5	NONE	-	< 5.0	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-
Hexachlorobutadiene	µg/kg	5	NONE	-	< 5.0	-	-	-
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	-	< 5.0	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	< 0.2	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Hexachloroethane	mg/kg	0.05	ISO 17025	-	< 0.05	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
2-Nitrophenol	mg/kg	0.3	NONE	-	< 0.3	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	< 0.1	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	-	< 0.2	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	< 0.1	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	NONE	-	< 0.1	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
4-Nitroaniline	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Azobenzene	mg/kg	0.3	NONE	-	< 0.3	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	< 0.2	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	< 0.30	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	< 0.3	-	-	-
Dibutyl phthalate	mg/kg	0.2	NONE	-	< 0.2	-	-	-
Anthraquinone	mg/kg	0.3	NONE	-	< 0.3	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	NONE	-	< 0.3	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	275871	275872	275873
Sample Reference	WLS04	WLS05	WLS06
Sample Number	ES	ES	ES
Depth (m)	2.00	0.20	0.50
Date Sampled	30/07/2024	30/07/2024	30/07/2024
Time Taken	1030	1130	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	4.3	21
Total mass of sample received	kg	0.1	NONE	1.4	1.5	1.4

Asbestos

Asbestos in Soil Detected/Not Detected	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	PKU	PKU	PKU
Actinolite detected	Type	N/A	ISO 17025	-	-	-
Amosite detected	Type	N/A	ISO 17025	-	-	-
Anthophyllite detected	Type	N/A	ISO 17025	-	-	-
Chrysotile detected	Type	N/A	ISO 17025	-	-	-
Crocidolite detected	Type	N/A	ISO 17025	-	-	-
Tremolite detected	Type	N/A	ISO 17025	-	-	-

Asbestos % by hand picking/weighing	%	0.001	ISO 17025	-	-	-
-------------------------------------	---	-------	-----------	---	---	---

Asbestos Containing Material Types Detected (ACM)	Type	N/A	ISO 17025	-	-	-
---	------	-----	-----------	---	---	---

General Inorganics

pH (L099)	pH Units	N/A	MCERTS	8.2	8.5	7.9
Total Cyanide	mg/kg	1	MCERTS	U/S ^{*U/S}	1.5	8.1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	310	75	98
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.157	0.0373	0.0488
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	157	37.3	48.8
Sulphide	mg/kg	1	MCERTS	18	9.2	6.3
Organic Matter (automated)	%	0.1	MCERTS	6	4.2	7.4
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	3.5	-	-

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	U/S ^{*U/S}	< 1.0	< 1.0
----------------------------	-------	---	--------	---------------------	-------	-------

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	275871	275872	275873
Sample Reference	WLS04	WLS05	WLS06
Sample Number	ES	ES	ES
Depth (m)	2.00	0.20	0.50
Date Sampled	30/07/2024	30/07/2024	30/07/2024
Time Taken	1030	1130	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	5.9	0.05	6.4
Acenaphthylene	mg/kg	0.05	MCERTS	0.39	< 0.05	0.28
Acenaphthene	mg/kg	0.05	MCERTS	18	< 0.05	7
Fluorene	mg/kg	0.05	MCERTS	13	0.06	4.2
Phenanthrene	mg/kg	0.05	MCERTS	81	0.56	28
Anthracene	mg/kg	0.05	MCERTS	21	0.12	5.6
Fluoranthene	mg/kg	0.05	MCERTS	92	1.1	24
Pyrene	mg/kg	0.05	MCERTS	77	1	20
Benzo(a)anthracene	mg/kg	0.05	MCERTS	35	0.46	10
Chrysene	mg/kg	0.05	MCERTS	43	0.7	10
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	39	0.56	12
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	13	0.23	3.9
Benzo(a)pyrene	mg/kg	0.05	MCERTS	27	0.4	9.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	14	0.2	4.7
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	< 0.05	< 0.05	1.3
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	16	0.31	5

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	495	5.76	151
-----------------------------	-------	-----	-----------	-----	------	-----

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	44	8	48
Boron (water soluble)	mg/kg	0.2	MCERTS	0.6	-	-
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.8	2.6
Chromium (hexavalent)	mg/kg	1.8	MCERTS	U/S ^{u/s}	< 1.8	36
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	27	16	68
Copper (aqua regia extractable)	mg/kg	1	MCERTS	300	200	390
Lead (aqua regia extractable)	mg/kg	1	MCERTS	340	110	2300
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	1.6
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	48	16	27
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	1	1.1
Vanadium (aqua regia extractable)	mg/kg	1	MCERTS	53	-	-
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	200	290	1200

Petroleum Hydrocarbons

TPH (>EC6 - EC8) HS_1D_TOTAL	mg/kg	0.01	MCERTS	-	-	< 0.01
TPH (>EC8 - EC10) HS_1D_TOTAL	mg/kg	0.02	MCERTS	-	-	< 0.02
TPH (>EC10 - EC12) EH_CU_1D_TOTAL	mg/kg	2	MCERTS	-	-	23
TPH (>EC12 - EC16) EH_CU_1D_TOTAL	mg/kg	4	MCERTS	-	-	88
TPH (>EC16 - EC21) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-	180
TPH (>EC21 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	-	-	360

TPH Total >EC6 - EC40 EH_CU+HS_1D_TOTAL	mg/kg	10	NONE	2000	-	650
---	-------	----	------	------	---	-----

Petroleum Range Organics (EC6 - EC10) HS_1D_TOTAL	mg/kg	1	ISO 17025	< 1.0	-	< 1.0
TPH (EC10 - EC40) EH_CU_1D_TOTAL	mg/kg	10	MCERTS	2000	-	650

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number		275871	275872	275873
Sample Reference		WLS04	WLS05	WLS06
Sample Number		ES	ES	ES
Depth (m)		2.00	0.20	0.50
Date Sampled		30/07/2024	30/07/2024	30/07/2024
Time Taken		1030	1130	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

VOCs

Chloromethane	µg/kg	5	ISO 17025	-	-	-
Chloroethane	µg/kg	5	NONE	-	-	-
Bromomethane	µg/kg	5	ISO 17025	-	-	-
Vinyl Chloride	µg/kg	5	NONE	-	-	-
Trichlorofluoromethane	µg/kg	5	NONE	-	-	-
1,1-Dichloroethene	µg/kg	5	NONE	-	-	-
1,1,2-Trichloro 1,2,2-Trifluoroethane	µg/kg	5	NONE	-	-	-
Trans 1,2-dichloroethylene	µg/kg	5	NONE	-	-	-
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	-	-	-
1,1-Dichloroethane	µg/kg	5	ISO 17025	-	-	-
2,2-Dichloropropane	µg/kg	5	NONE	-	-	-
Chloroform	µg/kg	5	ISO 17025	-	-	-
1,1,1-Trichloroethane	µg/kg	5	ISO 17025	-	-	-
1,2-Dichloroethane	µg/kg	5	ISO 17025	-	-	-
1,1-Dichloropropene	µg/kg	5	ISO 17025	-	-	-
Cis-1,2-dichloroethene	µg/kg	5	ISO 17025	-	-	-
Benzene	µg/kg	5	MCERTS	-	-	-
Carbon tetrachloride	µg/kg	5	NONE	-	-	-
1,2-Dichloropropane	µg/kg	5	ISO 17025	-	-	-
Trichloroethene	µg/kg	5	ISO 17025	-	-	-
Dibromomethane	µg/kg	5	ISO 17025	-	-	-
Bromodichloromethane	µg/kg	5	ISO 17025	-	-	-
Cis-1,3-dichloropropene	µg/kg	5	ISO 17025	-	-	-
Trans-1,3-dichloropropene	µg/kg	5	ISO 17025	-	-	-
Toluene	µg/kg	5	MCERTS	-	-	-
1,1,2-Trichloroethane	µg/kg	5	ISO 17025	-	-	-
1,3-Dichloropropane	µg/kg	5	ISO 17025	-	-	-
Dibromochloromethane	µg/kg	5	ISO 17025	-	-	-
Tetrachloroethene	µg/kg	5	NONE	-	-	-
1,2-Dibromoethane	µg/kg	5	ISO 17025	-	-	-
Chlorobenzene	µg/kg	5	ISO 17025	-	-	-
1,1,1,2-Tetrachloroethane	µg/kg	5	ISO 17025	-	-	-
Ethylbenzene	µg/kg	5	MCERTS	-	-	-
p & m-Xylene	µg/kg	5	MCERTS	-	-	-
Styrene	µg/kg	5	ISO 17025	-	-	-
Bromoform	µg/kg	5	NONE	-	-	-
o-Xylene	µg/kg	5	MCERTS	-	-	-
Isopropylbenzene	µg/kg	5	ISO 17025	-	-	-
1,1,2,2-Tetrachloroethane	µg/kg	5	NONE	-	-	-
Bromobenzene	µg/kg	5	NONE	-	-	-
n-Propylbenzene	µg/kg	5	ISO 17025	-	-	-
2-Chlorotoluene	µg/kg	5	ISO 17025	-	-	-
4-Chlorotoluene	µg/kg	5	ISO 17025	-	-	-
1,3,5-Trimethylbenzene	µg/kg	5	ISO 17025	-	-	-
tert-Butylbenzene	µg/kg	5	ISO 17025	-	-	-
1,2,4-Trimethylbenzene	µg/kg	5	ISO 17025	-	-	-
sec-Butylbenzene	µg/kg	5	ISO 17025	-	-	-
1,3-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	-
p-Isopropyltoluene	µg/kg	5	ISO 17025	-	-	-
1,4-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	-
1,2-Dichlorobenzene	µg/kg	5	ISO 17025	-	-	-

Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				275871	275872	275873
Sample Reference				WLS04	WLS05	WLS06
Sample Number				ES	ES	ES
Depth (m)				2.00	0.20	0.50
Date Sampled				30/07/2024	30/07/2024	30/07/2024
Time Taken				1030	1130	1200
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status			
Butylbenzene	µg/kg	5	NONE	-	-	-
1,2-Dibromo-3-chloropropane	µg/kg	5	ISO 17025	-	-	-
1,2,4-Trichlorobenzene	µg/kg	5	ISO 17025	-	-	-
Hexachlorobutadiene	µg/kg	5	NONE	-	-	-
1,2,3-Trichlorobenzene	µg/kg	5	ISO 17025	-	-	-

SVOCs

Aniline	mg/kg	0.1	NONE	-	-	-
Phenol	mg/kg	0.2	ISO 17025	-	-	-
2-Chlorophenol	mg/kg	0.1	MCERTS	-	-	-
Bis(2-chloroethyl)ether	mg/kg	0.2	MCERTS	-	-	-
1,3-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
1,2-Dichlorobenzene	mg/kg	0.1	MCERTS	-	-	-
1,4-Dichlorobenzene	mg/kg	0.2	MCERTS	-	-	-
Bis(2-chloroisopropyl)ether	mg/kg	0.1	MCERTS	-	-	-
2-Methylphenol	mg/kg	0.3	MCERTS	-	-	-
Hexachloroethane	mg/kg	0.05	ISO 17025	-	-	-
Nitrobenzene	mg/kg	0.3	MCERTS	-	-	-
4-Methylphenol	mg/kg	0.2	NONE	-	-	-
Isophorone	mg/kg	0.2	MCERTS	-	-	-
2-Nitrophenol	mg/kg	0.3	NONE	-	-	-
2,4-Dimethylphenol	mg/kg	0.3	MCERTS	-	-	-
Bis(2-chloroethoxy)methane	mg/kg	0.3	MCERTS	-	-	-
1,2,4-Trichlorobenzene	mg/kg	0.3	MCERTS	-	-	-
2,4-Dichlorophenol	mg/kg	0.3	MCERTS	-	-	-
4-Chloroaniline	mg/kg	0.1	NONE	-	-	-
Hexachlorobutadiene	mg/kg	0.1	MCERTS	-	-	-
4-Chloro-3-methylphenol	mg/kg	0.1	NONE	-	-	-
2,4,6-Trichlorophenol	mg/kg	0.1	NONE	-	-	-
2,4,5-Trichlorophenol	mg/kg	0.2	NONE	-	-	-
2-Methylnaphthalene	mg/kg	0.1	NONE	-	-	-
2-Chloronaphthalene	mg/kg	0.1	MCERTS	-	-	-
Dimethylphthalate	mg/kg	0.1	MCERTS	-	-	-
2,6-Dinitrotoluene	mg/kg	0.1	NONE	-	-	-
2,4-Dinitrotoluene	mg/kg	0.2	NONE	-	-	-
Dibenzofuran	mg/kg	0.2	MCERTS	-	-	-
4-Chlorophenyl phenyl ether	mg/kg	0.3	MCERTS	-	-	-
Diethyl phthalate	mg/kg	0.2	MCERTS	-	-	-
4-Nitroaniline	mg/kg	0.2	NONE	-	-	-
Azobenzene	mg/kg	0.3	NONE	-	-	-
Bromophenyl phenyl ether	mg/kg	0.2	MCERTS	-	-	-
Hexachlorobenzene	mg/kg	0.3	MCERTS	-	-	-
Carbazole	mg/kg	0.3	MCERTS	-	-	-
Dibutyl phthalate	mg/kg	0.2	NONE	-	-	-
Anthraquinone	mg/kg	0.3	NONE	-	-	-
Butyl benzyl phthalate	mg/kg	0.3	NONE	-	-	-

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number: 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street
Your Order No:

Certificate of Analysis - Asbestos Quantification

Methods:

Qualitative Analysis

The samples were analysed qualitatively for asbestos by polarising light and dispersion staining as described by the Health and Safety Executive in HSG 248.

Quantitative Analysis

The analysis was carried out using our documented in-house method A006 based on HSE Contract Research Report No: 83/1996: Development and Validation of an analytical method to determine the amount of asbestos in soils and loose aggregates (Davies et al, 1996) and HSG 248. Our method includes initial examination of the entire representative sample, then fractionation and detailed analysis of each fraction, with quantification by hand picking and weighing.

The limit of detection (reporting limit) of this method is 0.001 %.

The method has been validated using samples of at least 100 g, results for samples smaller than this should be interpreted with caution.

Both Qualitative and Quantitative Analyses are UKAS accredited.

Sample Number	Sample ID	Sample Depth (m)	Sample Weight (g)	Asbestos Containing Material Types Detected (ACM)	PLM Results	Asbestos by hand picking/weighing (%)	Total % Asbestos in Sample
275866	WLS01	0.20	139	Loose Fibres	Chrysotile	< 0.001	< 0.001

Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

Analytical Report Number : 24-034156

Project / Site name: McDonalds Restaurant Molesworth Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
275866	WLS01	ES	0.2	Brown loam and gravel with tar and brick
275867	WLS01	ES	1	Brown loam and sand with clinker and brick
275868	WLS02	ES	0.4	Brown clay and sand with gravel and stones
275869	WLS02	ES	3.5	Brown clay and sand with gravel and brick
275870	WLS03	ES	0.6	Brown loam and gravel with clinker and concrete
275871	WLS04	ES	2	Brown clay with clinker and brick
275872	WLS05	ES	0.2	Brown loam and sand with gravel and tar
275873	WLS06	ES	0.5	Brown loam and sand with gravel and metal

Analytical Report Number : 24-034156

Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in Soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques	In-house method based on HSG 248, 2021	A001B	D	ISO 17025
Asbestos Quantification - Gravimetric	Asbestos quantification by gravimetric method - in house method based on references	HSE Report No: 83/1996, HSG 248 (2021), HSG 264 (2012) & SCA Blue Book (draft)	A006B	D	ISO 17025
Organic matter (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L009B	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode	In-house method	L010	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L038B	D	MCERTS
Boron, water soluble, in soil	Determination of water soluble boron in soil by hot water extract followed by ICP-OES	In-house method based on Second Site Properties version 3	L038B	D	MCERTS
Sulphate, water soluble, in soil (16hr extraction)	Sulphate, water soluble, in soil (16hr extraction)	In-house method	L038B	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	MCERTS
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry	In-house method	L080	W	MCERTS

Analytical Report Number : 24-034156
Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement	In-house method	L099	D	MCERTS

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

*U/S - Unsuitable for analysis due to sample matrix.



Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 24-033799

Project / Site name: McDonalds Restaurant Molesworth Street

Your job number: J15721

Your order number:

Report Issue Number: 1

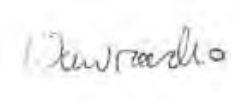
Samples Analysed: 2 water samples

Samples received on: 30/07/2024

Samples instructed on /
Analysis started on: 30/07/2024

Analysis completed by: 09/08/2024

Report issued on: 09/08/2024

Signed: 

Joanna Wawrzeczko
Senior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.



Analytical Report Number: 24-033799
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				273994	273995
Sample Reference				BH02	BH03
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/07/2024	30/07/2024
Time Taken				1000	1100
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		

General Inorganics

pH (L099)	pH Units	N/A	ISO 17025	6.8	6.4
Total Cyanide	µg/l	10	ISO 17025	< 10	< 10
Sulphate as SO ₄	µg/l	45	ISO 17025	16000	63100
Sulphide	µg/l	5	NONE	< 5.0	< 5.0

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	< 10	< 10
----------------------------	------	----	-----------	------	------

Speciated PAHs

Naphthalene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Acenaphthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluorene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Phenanthrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Chrysene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	ISO 17025	< 0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	ISO 17025	< 0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.16	ISO 17025	< 0.16	< 0.16
-------------------	------	------	-----------	--------	--------

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	0.15	ISO 17025	1.2	0.7
Cadmium (dissolved)	µg/l	0.02	ISO 17025	0.03	0.03
Chromium (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Copper (dissolved)	µg/l	0.5	ISO 17025	1.2	1.4
Lead (dissolved)	µg/l	0.2	ISO 17025	< 0.2	< 0.2
Mercury (dissolved)	µg/l	0.05	ISO 17025	< 0.05	< 0.05
Nickel (dissolved)	µg/l	0.5	ISO 17025	5.9	13
Selenium (dissolved)	µg/l	0.6	ISO 17025	< 0.6	< 0.6
Zinc (dissolved)	µg/l	0.5	ISO 17025	1.5	14



Analytical Report Number: 24-033799
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				273994	273995
Sample Reference				BH02	BH03
Sample Number				None Supplied	None Supplied
Depth (m)				None Supplied	None Supplied
Date Sampled				30/07/2024	30/07/2024
Time Taken				1000	1100
Analytical Parameter (Water Analysis)	Units	Test Limit of detection	Test Accreditation Status		

Petroleum Hydrocarbons

TPH - Aliphatic >EC5 - EC6 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC6 - EC8 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC8 - EC10 _{HS_1D_AL}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aliphatic >EC10 - EC12 _{EH_1D_AL_MS}	µg/l	10	NONE	1200	< 10
TPH - Aliphatic >EC12 - EC16 _{EH_1D_AL_MS}	µg/l	10	NONE	1600	< 10
TPH - Aliphatic >EC16 - EC21 _{EH_1D_AL_MS}	µg/l	10	NONE	90	< 10
TPH - Aliphatic >EC21 - EC35 _{EH_1D_AL_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aliphatic >EC5 - EC35 _{HS+EH_1D_AL_MS}	µg/l	10	NONE	2800	< 10

TPH - Aromatic >EC5 - EC7 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC7 - EC8 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC8 - EC10 _{HS_1D_AR}	µg/l	1	ISO 17025	< 1.0	< 1.0
TPH - Aromatic >EC10 - EC12 _{EH_1D_AR_MS}	µg/l	10	NONE	480	< 10
TPH - Aromatic >EC12 - EC16 _{EH_1D_AR_MS}	µg/l	10	NONE	190	< 10
TPH - Aromatic >EC16 - EC21 _{EH_1D_AR_MS}	µg/l	10	NONE	100	< 10
TPH - Aromatic >EC21 - EC35 _{EH_1D_AR_MS}	µg/l	10	NONE	< 10	< 10
TPH - Aromatic >EC5 - EC35 _{HS+EH_1D_AR_MS}	µg/l	10	NONE	760	< 10

VOCs

MTBE (Methyl Tertiary Butyl Ether)	µg/l	3	ISO 17025	< 3.0	< 3.0
Benzene	µg/l	3	ISO 17025	< 3.0	< 3.0
Toluene	µg/l	3	ISO 17025	< 3.0	< 3.0
Ethylbenzene	µg/l	3	ISO 17025	< 3.0	< 3.0
p & m-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0
o-xylene	µg/l	3	ISO 17025	< 3.0	< 3.0

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



Analytical Report Number : 24-033799
Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Metals in water by ICP-MS (dissolved)	Determination of metals in water by acidification followed by ICP-MS. Accredited Matrices: SW, GW, PW except B=SW,GW, Hg=SW,PW, Al=SW,PW	In-house method based on USEPA Method 6020 & 200.8 for the determination of trace elements in water by ICP-MS	L012B	W	ISO 17025
Sulphide in water	Determination of sulphide in water by ion selective electrode	In-house method	L029	W	NONE
Sulphate in water	Determination of sulphate in water after filtration by acidification followed by ICP-OES. Accredited Matrices SW, GW, PW, PrW, LL	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil	L039B	W	ISO 17025
Total petroleum hydrocarbons with carbon banding by GC-MS in water	Determination of total petroleum hydrocarbons in water by GC-MS/GC-MS HS with carbon banding aliphatic and aromatic	In-house method	L070B	W	NONE
BTEX and/or Volatile organic compounds in water	Determination of volatile organic compounds in water by headspace GC-MS. Accredited matrices: SW PW GW	In-house method based on USEPA 8260	L073B	W	ISO 17025
Monohydric phenols in water	Determination of phenols in water by continuous flow analyser. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Total cyanide in water	Determination of total cyanide by distillation followed by colorimetry. Accredited matrices: SW PW GW	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Total petroleum hydrocarbons by GC-MS HS in water	Determination of total petroleum hydrocarbons in water by GC-MS HS	In-house method	L088B	W	ISO 17025
pH at 20°C in water (automated)	Determination of pH in water by electrometric measurement. Accredited matrices: SW PW GW	In-house method	L099	W	ISO 17025



Analytical Report Number : 24-033799
Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:
Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Speciated PAHs and/or Semi-volatile organic compounds in water	Determination of semi-volatile organic compounds (including PAH) in leachate by extraction in dichloromethane followed by GC-MS	In-house method based on USEPA 8270	L102B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).
For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).
For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.
Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.
The result for sum should be interpreted with caution

Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404

f: 01923 237404

e: reception@i2analytical.com

Analytical Report Number : 24-032843

Project / Site name:	McDonalds Restaurant Molesworth Street	Samples received on:	25/07/2024
Your job number:	J15721	Samples instructed on/ Analysis started on:	25/07/2024
Your order number:		Analysis completed by:	02/08/2024
Report Issue Number:	1	Report issued on:	02/08/2024
Samples Analysed:	2 soil samples - 2 2stage samples		

Signed: _____


Dominika Liana
Junior Reporting Specialist
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils - 4 weeks from reporting
leachates - 2 weeks from reporting
waters - 2 weeks from reporting
asbestos - 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-032843
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number	268844	268846
Sample Reference	BH02	BH02
Sample Number	None Supplied	None Supplied
Depth (m)	0.50-1.00	4.00-5.00
Date Sampled	23/07/2024	24/07/2024
Time Taken	None Supplied	None Supplied
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection
		Test Accreditation Status

Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	13	11
Total mass of sample received	kg	0.1	NONE	1.3	1.2

General Inorganics

pH (L005B)	pH Units	N/A	MCERTS	8.4	8.1
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	2.8	0.4
Loss on Ignition @ 450°C	%	0.2	MCERTS	6.4	1.9
Acid Neutralisation Capacity	mmol/kg	-9999	NONE	13	5.5

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	0.71	0.06
Acenaphthylene	mg/kg	0.05	MCERTS	0.13	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	3.2	< 0.05
Fluorene	mg/kg	0.05	MCERTS	2.1	< 0.05
Phenanthrene	mg/kg	0.05	MCERTS	30	0.1
Anthracene	mg/kg	0.05	MCERTS	6.7	< 0.05
Fluoranthene	mg/kg	0.05	MCERTS	41	< 0.05
Pyrene	mg/kg	0.05	MCERTS	34	< 0.05
Benzo(a)anthracene	mg/kg	0.05	MCERTS	16	< 0.05
Chrysene	mg/kg	0.05	MCERTS	16	< 0.05
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	19	< 0.05
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	8	< 0.05
Benzo(a)pyrene	mg/kg	0.05	MCERTS	16	< 0.05
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	7.9	< 0.05
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	1.7	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	9.1	< 0.05
Coronene	mg/kg	0.05	NONE	2.9	< 0.05

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	213	< 0.80
Total WAC-17 PAHs	mg/kg	0.85	NONE	216	< 0.85

Petroleum Hydrocarbons

Mineral Oil (EC10 - EC40) EH_CU_ID_AL	mg/kg	10	NONE	590	23
--	-------	----	------	-----	----

VOCs

Benzene	µg/kg	5	MCERTS	< 5.0	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0	< 5.0

Total BTEX	µg/kg	5	MCERTS	< 5.0	< 5.0
------------	-------	---	--------	-------	-------

Analytical Report Number: 24-032843
Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				268844	268846
Sample Reference				BH02	BH02
Sample Number				None Supplied	None Supplied
Depth (m)				0.50-1.00	4.00-5.00
Date Sampled				23/07/2024	24/07/2024
Time Taken				None Supplied	None Supplied
Analytical Parameter (Soil Analysis)		Units	Test Limit of detection	Test Accreditation Status	

PCBs by GC-MS

PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001	< 0.001

Total PCBs	mg/kg	0.007	MCERTS	< 0.007	< 0.007
------------	-------	-------	--------	---------	---------

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected



4041



Environmental Science

i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results							
Report No:	24-032843						
				Client: SOUTHERNT			
Location	McDonalds Restaurant Molesworth Street						
Lab Reference (Sample Number)	268844			Landfill Waste Acceptance Criteria			
Sampling Date	23/07/2024			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	BH02						
Depth (m)	0.50-1.00						
Solid Waste Analysis							
TOC (%)**	2.8			3%	5%	6%	
Loss on Ignition (%) **	6.4			--	--	10%	
BTEX (µg/kg)**	< 5.0			6000	--	--	
Sum of PCBs (mg/kg)**	< 0.007			1	--	--	
Mineral Oil (mg/kg) BH, LD, CU, AL	590			500	--	--	
Total PAH (WAC-17) (mg/kg)	216			100	--	--	
pH (units)**	8.4			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	13			--	To be evaluated	To be evaluated	
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0039	0.0023		0.024	0.5	2	25
Barium *	0.088	0.022		0.26	20	100	300
Cadmium *	0.00019	0.00015		0.0015	0.04	1	5
Chromium *	0.0084	0.0023		0.026	0.5	10	70
Copper *	0.044	0.020		0.21	2	50	100
Mercury *	< 0.00070	< 0.0007		< 0.0070	0.01	0.2	2
Molybdenum *	0.0087	0.0022		0.026	0.5	10	30
Nickel *	0.0062	0.0028		0.030	0.4	10	40
Lead *	0.019	< 0.0017		< 0.017	0.5	10	50
Antimony *	< 0.0020	< 0.0020		< 0.020	0.06	0.7	5
Selenium *	< 0.0050	< 0.0050		< 0.050	0.1	0.5	7
Zinc *	0.028	0.0086		0.097	4	50	200
Chloride *	< 4.0	< 4.0		23	800	15000	25000
Fluoride*	0.60	0.20		2.3	10	150	500
Sulphate *	17	4.8		55	1000	20000	50000
TDS*	81	24		270	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.16	< 0.13		< 0.50	1	-	-
DOC	17.4	5.0		57.1	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.3						
Dry Matter (%)	87						
Moisture (%)	13						
Stage 1							
Volume Eluate L2 (litres)	0.318						
Filtered Eluate VE1 (litres)	0.11						
Results are expressed on a dry weight basis, after correction for moisture content where applicable. * = UKAS accredited (liquid eluate analysis only)							
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation ** = MCERTS accredited							

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.



4041



i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404
Fax: 01923 237404
email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results							
Report No:	24-032843						
				Client: SOUTHERNT			
Location	McDonalds Restaurant Molesworth Street						
Lab Reference (Sample Number)	268846			Landfill Waste Acceptance Criteria			
Sampling Date	24/07/2024			Limits			
Sample ID	BH02			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Depth (m)	4.00-5.00						
Solid Waste Analysis							
TOC (%)**	0.4			3%	5%	6%	
Loss on Ignition (%) **	1.9			--	--	10%	
BTEX (µg/kg)**	< 5.0			6000	--	--	
Sum of PCBs (mg/kg)**	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH_ID_CU_AL	23			500	--	--	
Total PAH (WAC-17) (mg/kg)	< 0.85			100	--	--	
pH (units)**	8.1			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	5.5			--	To be evaluated	To be evaluated	
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0020	< 0.0020		< 0.020	0.5	2	25
Barium *	0.097	0.075		0.76	20	100	300
Cadmium *	< 0.00010	< 0.00010		< 0.0010	0.04	1	5
Chromium *	0.00067	< 0.00060		< 0.0060	0.5	10	70
Copper *	0.012	0.0084		0.087	2	50	100
Mercury *	< 0.00070	< 0.0007		< 0.0070	0.01	0.2	2
Molybdenum *	0.023	0.0066		0.078	0.5	10	30
Nickel *	< 0.00090	0.00097		0.0094	0.4	10	40
Lead *	< 0.0017	< 0.0017		< 0.017	0.5	10	50
Antimony *	< 0.0020	< 0.0020		< 0.020	0.06	0.7	5
Selenium *	< 0.0050	< 0.0050		< 0.050	0.1	0.5	7
Zinc *	0.0059	0.0015		0.018	4	50	200
Chloride *	< 4.0	< 4.0		< 15	800	15000	25000
Fluoride*	0.21	0.13		1.4	10	150	500
Sulphate *	28	10		120	1000	20000	50000
TDS*	97	53		560	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.16	< 0.13		< 0.50	1	-	-
DOC	10.2	17		163	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	89						
Moisture (%)	11						
Stage 1							
Volume Eluate L2 (litres)	0.321						
Filtered Eluate VE1 (litres)	0.14						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							

Analytical Report Number : 24-032843

Project / Site name: McDonalds Restaurant Molesworth Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
268844	BH02	None Supplied	0.50-1.00	Brown loam and gravel with clinker and brick
268846	BH02	None Supplied	4.00-5.00	Brown clay and sand

Analytical Report Number : 24-032843

Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L023B	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031B	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033B	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037B	W	NONE
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed	L039B	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed	L039B	W	ISO 17025
Preparation WAC leachate		In-house method	L043B	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	NONE

Analytical Report Number : 24-032843

Project / Site name: McDonalds Restaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30°C.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution



Southern Testing Laboratories Ltd
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

t: 01342 333100

e: contamresults@southerntesting.co.uk
vfrancis@southerntesting.co.uk

i2 Analytical Ltd.
7 Woodshots Meadow,
Croxley Green
Business Park,
Watford,
Herts,
WD18 8YS

t: 01923 225404
f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 24-034158

Project / Site name:	McDonalds Reestaurant Molesworth Street	Samples received on:	30/07/2024
Your job number:	J15721	Samples instructed on / Analysis started on:	02/08/2024
Your order number:		Analysis completed by:	09/08/2024
Report Issue Number:	1	Report issued on:	09/08/2024
Samples Analysed:	1 soil sample - 1 2stage sample		

Signed: _____

Anna Goc
PL Head of Reporting Team
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41-711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 24-034158

Project / Site name: McDonalds Restaurant Molesworth Street

Lab Sample Number				275878
Sample Reference				WLS02
Sample Number				ES
Depth (m)				1.75
Date Sampled				29/07/2024
Time Taken				1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Stone Content	%	0.1	NONE	< 0.1
Moisture Content	%	0.01	NONE	7.8
Total mass of sample received	kg	0.1	NONE	1.4

General Inorganics

pH (L005B)	pH Units	N/A	MCERTS	8.1
Total Organic Carbon (TOC) – Manual	%	0.1	MCERTS	1.1
Loss on Ignition @ 450°C	%	0.2	MCERTS	2
Acid Neutralisation Capacity	mmol/kg	-9999	NONE	6.7

Speciated PAHs

Naphthalene	mg/kg	0.05	MCERTS	2.4
Acenaphthylene	mg/kg	0.05	MCERTS	< 0.05
Acenaphthene	mg/kg	0.05	MCERTS	3.6
Fluorene	mg/kg	0.05	MCERTS	3
Phenanthrene	mg/kg	0.05	MCERTS	17
Anthracene	mg/kg	0.05	MCERTS	3.6
Fluoranthene	mg/kg	0.05	MCERTS	14
Pyrene	mg/kg	0.05	MCERTS	12
Benzo(a)anthracene	mg/kg	0.05	MCERTS	4.6
Chrysene	mg/kg	0.05	MCERTS	4.9
Benzo(b)fluoranthene	mg/kg	0.05	ISO 17025	5.6
Benzo(k)fluoranthene	mg/kg	0.05	ISO 17025	1.7
Benzo(a)pyrene	mg/kg	0.05	MCERTS	4.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	MCERTS	2.3
Dibenz(a,h)anthracene	mg/kg	0.05	MCERTS	0.57
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	2.7
Coronene	mg/kg	0.05	NONE	0.1

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	ISO 17025	81.7
Total WAC-17 PAHs	mg/kg	0.85	NONE	81.7

Petroleum Hydrocarbons

Mineral Oil (EC10 - EC40) EH_CU_10_AL	mg/kg	10	NONE	68
--	-------	----	------	----

VOCS

Benzene	µg/kg	5	MCERTS	< 5.0
Toluene	µg/kg	5	MCERTS	< 5.0
Ethylbenzene	µg/kg	5	MCERTS	< 5.0
p & m-Xylene	µg/kg	5	MCERTS	< 5.0
o-Xylene	µg/kg	5	MCERTS	< 5.0
Total BTEX	µg/kg	5	MCERTS	< 5.0

Analytical Report Number: 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

Lab Sample Number				275878
Sample Reference				WLS02
Sample Number				ES
Depth (m)				1.75
Date Sampled				29/07/2024
Time Taken				1400
Analytical Parameter (Soil Analysis)	Units	Test Limit of detection	Test Accreditation Status	

PCBs by GC-MS

PCB Congener 28	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 52	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 101	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 118	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 138	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 153	mg/kg	0.001	MCERTS	< 0.001
PCB Congener 180	mg/kg	0.001	MCERTS	< 0.001

Total PCBs	mg/kg	0.007	MCERTS	< 0.007
------------	-------	-------	--------	---------

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

Lab Sample Number	275878			
Sample Reference	WLS02			
Sample Number	ES			
Depth (m)	1.75			
Date Sampled	29/07/2024			
Time Taken	1400			
Analytical Parameter (Two-stage Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status	

Dry matter	%	0.1	NONE	91
Moisture of sample	%	N/A	NONE	10
Recovered volume A	l	N/A	NONE	0.24
Volume used first stage	l	N/A	NONE	0.332

General 2:1

Sulphate as SO ₄	mg/l	0.045	ISO 17025	25
Monohydric Phenols	mg/l	0.16	ISO 17025	< 0.16
Chloride	mg/l	4	ISO 17025	7.9
Fluoride	mg/l	0.05	ISO 17025	0.48
Dissolved Organic Carbon	mg/l	0.1	NONE	13.9
Total Dissolved Solids	mg/l	6	ISO 17025	120
Arsenic	mg/l	0.002	ISO 17025	0.0025
Cadmium	mg/l	0.0001	ISO 17025	< 0.00010
Chromium	mg/l	0.0006	ISO 17025	0.00086
Lead	mg/l	0.0017	ISO 17025	0.0021
Mercury	mg/l	0.0007	ISO 17025	< 0.00070
Selenium	mg/l	0.005	ISO 17025	< 0.0050
Copper	mg/l	0.0007	ISO 17025	0.02
Nickel	mg/l	0.0009	ISO 17025	0.0014
Zinc	mg/l	0.0009	ISO 17025	0.0064
Antimony	mg/l	0.002	ISO 17025	0.0041
Molybdenum	mg/l	0.0014	ISO 17025	0.017
Barium	mg/l	0.0012	ISO 17025	0.027

General 8:1

Sulphate as SO ₄	mg/l	0.045	ISO 17025	5.2
Monohydric Phenols	mg/l	0.13	ISO 17025	< 0.13
Chloride	mg/l	4	ISO 17025	< 4.0
Fluoride	mg/l	0.05	ISO 17025	0.22
Dissolved Organic Carbon	mg/l	0.1	NONE	14
Total Dissolved Solids	mg/l	6	ISO 17025	54
Arsenic	mg/l	0.002	ISO 17025	< 0.0020
Cadmium	mg/l	0.0001	ISO 17025	< 0.00010
Chromium	mg/l	0.0006	ISO 17025	0.00072
Lead	mg/l	0.0017	ISO 17025	0.002
Mercury	mg/l	0.0007	ISO 17025	< 0.0007
Selenium	mg/l	0.005	ISO 17025	< 0.0050
Copper	mg/l	0.0007	ISO 17025	0.0081
Nickel	mg/l	0.0009	ISO 17025	< 0.00090
Zinc	mg/l	0.0009	ISO 17025	0.0023
Antimony	mg/l	0.002	ISO 17025	< 0.0020
Molybdenum	mg/l	0.0014	ISO 17025	0.0036
Barium	mg/l	0.0012	ISO 17025	0.019

Analytical Report Number: 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

Lab Sample Number				275878
Sample Reference				WLS02
Sample Number				ES
Depth (m)				1.75
Date Sampled				29/07/2024
Time Taken				1400
Analytical Parameter (Two-stage Leachate Analysis)	Units	Test Limit of detection	Test Accreditation Status	

General 10:1

Sulphate as SO ₄	mg/kg	0.45	NONE	79
Monohydric Phenols	mg/kg	0.5	NONE	< 0.50
Chloride	mg/kg	15	NONE	28
Fluoride	mg/kg	0.2	NONE	2.5
Dissolved Organic Carbon	mg/kg	1	NONE	142
Total Dissolved Solids	mg/kg	60	NONE	630
Arsenic	mg/kg	0.02	NONE	< 0.020
Cadmium	mg/kg	0.001	NONE	< 0.0010
Chromium	mg/kg	0.006	NONE	0.0074
Lead	mg/kg	0.017	NONE	0.02
Mercury	mg/kg	0.007	NONE	< 0.0070
Selenium	mg/kg	0.05	NONE	< 0.050
Copper	mg/kg	0.007	NONE	0.098
Nickel	mg/kg	0.009	NONE	< 0.0090
Zinc	mg/kg	0.009	NONE	0.029
Antimony	mg/kg	0.02	NONE	< 0.020
Molybdenum	mg/kg	0.014	NONE	0.054
Barium	mg/kg	0.012	NONE	0.2

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

i2 Analytical

7 Woodshots Meadow
Croxley Green Business Park
Watford, WD18 8YS

Telephone: 01923 225404

Fax: 01923 237404

email: reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	24-034158						
				Client: SOUTHERNT			
Location	McDonalds Reestaurant Molesworth Street						
Lab Reference (Sample Number)	275878			Landfill Waste Acceptance Criteria			
				Limits			
Sampling Date	29/07/2024			Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill	
Sample ID	WLS02 ES						
Depth (m)	1.75						
Solid Waste Analysis							
TOC (%)**	1.1			3%	5%	6%	
Loss on Ignition (%) **	2.0			--	--	10%	
BTEX (µg/kg)**	< 5.0			6000	--	--	
Sum of PCBs (mg/kg)**	< 0.007			1	--	--	
Mineral Oil (mg/kg) EH_ID_CU_AL	68			500	--	--	
Total PAH (WAC-17) (mg/kg)	81.7			100	--	--	
pH (units)**	8.1			--	>6	--	
Acid Neutralisation Capacity (mmol / kg)	6.7			--	To be evaluated	To be evaluated	
Eluate Analysis	2:1	8:1		Cumulative 10:1	Limit values for compliance leaching test		
(BS EN 12457 - 3 preparation utilising end over end leaching procedure)	mg/l	mg/l		mg/kg	using BS EN 12457-3 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0025	< 0.0020		< 0.020	0.5	2	25
Barium *	0.027	0.019		0.20	20	100	300
Cadmium *	< 0.00010	< 0.00010		< 0.0010	0.04	1	5
Chromium *	0.00086	0.00072		0.0074	0.5	10	70
Copper *	0.020	0.0081		0.098	2	50	100
Mercury *	< 0.00070	< 0.0007		< 0.0070	0.01	0.2	2
Molybdenum *	0.017	0.0036		0.054	0.5	10	30
Nickel *	0.0014	< 0.00090		< 0.0090	0.4	10	40
Lead *	0.0021	0.0020		0.020	0.5	10	50
Antimony *	0.0041	< 0.0020		< 0.020	0.06	0.7	5
Selenium *	< 0.0050	< 0.0050		< 0.050	0.1	0.5	7
Zinc *	0.0064	0.0023		0.029	4	50	200
Chloride *	7.9	< 4.0		28	800	15000	25000
Fluoride*	0.48	0.22		2.5	10	150	500
Sulphate *	25	5.2		79	1000	20000	50000
TDS*	120	54		630	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.16	< 0.13		< 0.50	1	-	-
DOC	13.9	14		142	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.4						
Dry Matter (%)	92						
Moisture (%)	7.8						
Stage 1							
Volume Eluate L2 (litres)	0.332						
Filtered Eluate VE1 (litres)	0.24						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.				* = UKAS accredited (liquid eluate analysis only)			
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation				** = MCERTS accredited			
Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.							
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.							



Analytical Report Number : 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
275878	WLS02	ES	1.75	Brown loam and sand with gravel

Analytical Report Number : 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
pH at 20°C in soil	Determination of pH in soil by addition of water followed by electrometric measurement	In-house method	L005B	W	MCERTS
Moisture Content	Moisture content, determined gravimetrically (up to 30°C)	In-house method	L019B	W	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight	In-house method based on British Standard Methods and MCERTS requirements.	L019B	D	NONE
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate (Walkley Black Method)	In-house method	L023B	D	MCERTS
PCB's By GC-MS in soil	Determination of PCB by extraction with hexane followed by GC-MS	In-house method based on USEPA 8082	L027B	D	MCERTS
TDS in WAC leachate (BS EN 12457-3 Prep)	Determination of total dissolved solids in leachate by electrometric measurement	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L031B	W	ISO 17025
Fluoride in WAC leachate (BS EN 12457-3 Prep)	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L033B	W	ISO 17025
DOC in WAC leachate (BS EN 12457-3 Prep)	Determination of dissolved organic carbon in leachate by TOC/DOC NDIR analyser	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed.	L037B	W	NONE
Metals in WAC leachate (BS EN 12457-3 Prep)	Determination of metals in leachate by acidification followed by ICP-OES	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed	L039B	W	ISO 17025
Sulphate in WAC leachate (BS EN 12457-3 Prep)	Determination of sulphate in leachate by acidification followed by ICP-OES	In-house method based on Standard Methods for the Examination of Water and Waste Water, 21st Ed	L039B	W	ISO 17025
Preparation WAC leachate		In-house method	L043B	W	NONE
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance	L046B	W	NONE
Loss on ignition of soil @ 450°C	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace	In-house method	L047	D	MCERTS
Speciated PAHs and/or Semi-volatile organic compounds in soil	Determination of semi-volatile organic compounds (including PAH) in soil by extraction in dichloromethane and hexane followed by GC-MS	In-house method based on USEPA 8270	L064B	D	MCERTS
BTEX and/or Volatile organic compounds in soil	Determination of volatile organic compounds in soil by headspace GC-MS	In-house method based on USEPA 8260	L073B	W	MCERTS

Analytical Report Number : 24-034158

Project / Site name: McDonalds Reestaurant Molesworth Street

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total petroleum hydrocarbons by GC-FID/GC-MS HS in soil	Determination of total petroleum hydrocarbons in soil by GC-FID/GC-MS HS	In-house method	L076B/L088	D/W	NONE
Phenol Index in WAC leachate (BS EN 12457-3 Prep)	Determination of monohydric phenols in leachate by continuous flow analyser	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080	W	ISO 17025
Chloride in WAC leachate (BS EN 12457-3 Prep)	Determination of Chloride colorimetrically by discrete analyser	In-house based on MEWAM Method ISBN 0117516260	L082B	W	ISO 17025

For method numbers ending in 'UK' or 'A' analysis have been carried out in our laboratory in the United Kingdom (Watford).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL' or 'B' analysis have been carried out in our laboratory in Poland.

Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
_	Operator - underscore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

Quality control parameter failure associated with individual result applies to calculated sum of individuals.

The result for sum should be interpreted with caution

Test Results

Benzo(a)pyrene (BaP)

Client/client ref: Glanville Consu Site ref: Molesworth Street Rochdale

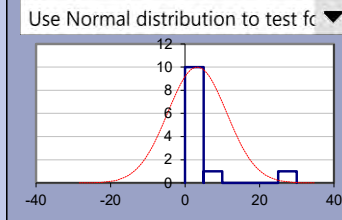
Project ref: J15721-GI

Data description: Made Ground across the site

Date: 26-Sep-2024

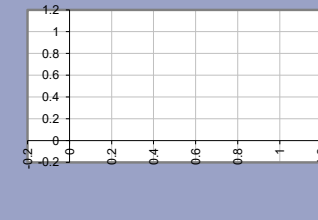
User details: SKT

Dataset:	Benzo(a)pyrene (BaP) ▼	
Sample mean (BaP), $\bar{X}$		3.255
Sample standard deviation, s		7.908
Sample size, n		12
Critical concentration, Cc (BaP)		10



Outliers & non-detects

Outliers present?	Yes
Significance level	5% ▼
Outliers excluded	0
Non-detects	0

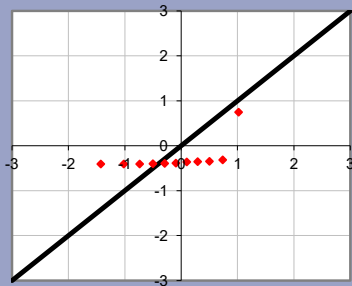


Normality test

Significance level: 5% ▼

Non-normal distribution

Use: Auto: Chebychev ▼

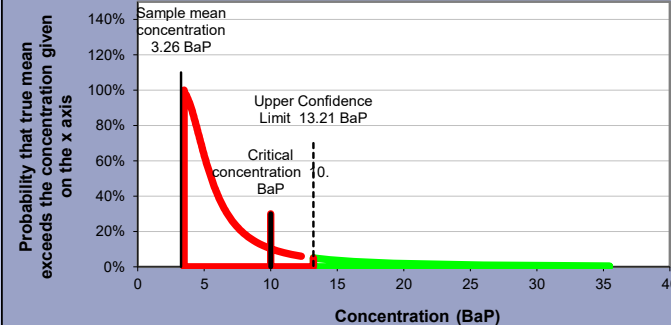


Test scenario:

Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

90%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? No

Not enough evidence

Back to data

Back to summary

Go to outlier test

Go to normality test

Test Results

Hexavalent Chromium (CrVI)

F/T:11/11

Client/client ref: Glanville Consu Site ref: Molesworth Street Rochdale

Project ref: J15721-GI

Data description: Made Ground across the site

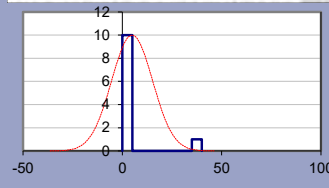
Date: 26-Sep-2024

User details: SKT

Dataset: Hexavalent Chromium (CrVI) F/T:1

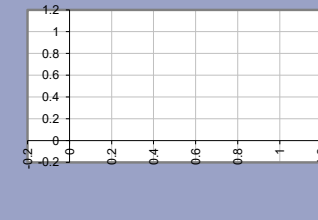
Sample mean (CrVI), $\bar{X}$	4.9091
Sample standard deviation, s	10.312
Sample size, n	11
Critical concentration, Cc (CrVI)	33

Use Normal distribution to test for



Outliers & non-detects

Outliers present?	Yes
Significance level	5%
Outliers excluded	0
Non-detects	0

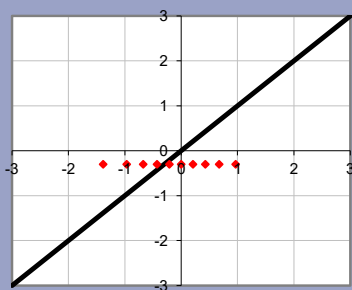


Normality test

Significance level: 5%

Non-normal distribution

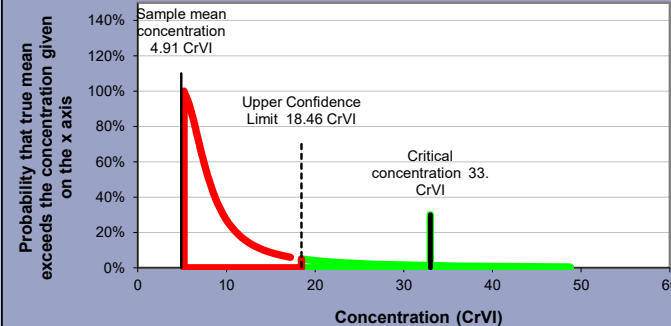
Use: Auto: Chebychev



Test scenario: Planning: is true mean lower than critical concentration ($\mu < Cc$)?

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq Cc$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < Cc$



Evidence against Null hypothesis:

99%

Base decision on: evidence level

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? Yes

$\mu < Cc$ (re this dataset)

Back to data

Back to summary

Go to outlier test

Go to normality test

Test Results

Lead (Pb)

Client/client ref: Glanville Consu Site ref: Molesworth Street Rochdale

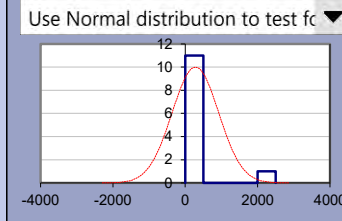
Project ref: J15721-GI

Data description: Made Ground across the site

Date: 26-Sep-2024

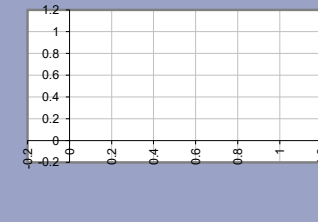
User details: SKT

Dataset:	Lead (Pb)	▼
Sample mean (Pb), $\bar{X}$	280.52	
Sample standard deviation, s	643.54	
Sample size, n	12	
Critical concentration, Cc (Pb)	2300	



Outliers & non-detects

Outliers present?	Yes
Significance level	5% ▼
Outliers excluded	0
Non-detects	0

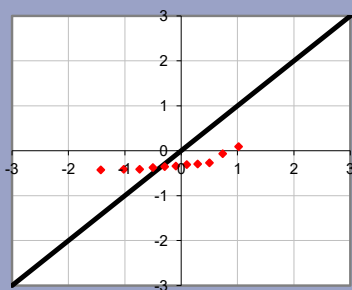


Normality test

Significance level: 5% ▼

Non-normal distribution

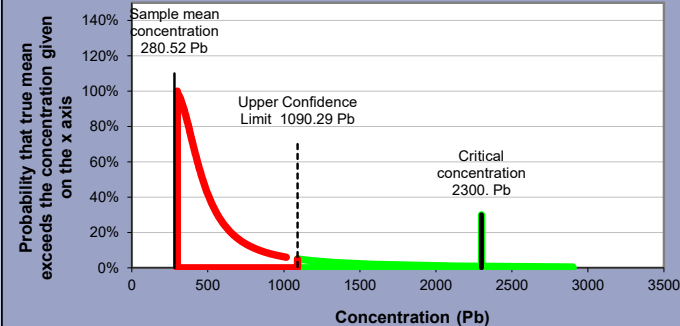
Use: Auto: Chebychev ▼



Test scenario: Planning: is true mean lower than critical concentration ($\mu < C_c$)? ▼

Null hypothesis: The true mean concentration is equal to or greater than the critical concentration: $\mu \geq C_c$

Alternative hypothesis: The true mean concentration is less than the critical concentration: $\mu < C_c$



Evidence against Null hypothesis:

99%

Base decision on: evidence level ▼

Evidence level required: 95%

Balance of probability? N/A

Reject Null Hypothesis? Yes

$\mu < C_c$ (re this dataset)

Back to data

Back to summary

Go to outlier test

Go to normality test

APPENDIX F

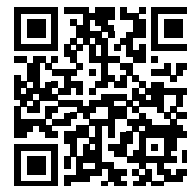
Waste Classification Report



Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



ALYKP-3HKVS-7Z9S6

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in **pale yellow**.

Job name

J15721 McDonalds Resturant, Molesworth Street

Description/Comments

Preliminary Waste Classification of shallow soils on site for off-site disposal.

Project

J15721

Site

Molesworth Street, Rochdale

Classified by

Name:	Company:
Sarah Toms	Southern Testing Ltd
Date:	Keeble House
03 Oct 2024 11:49 GMT	Stuart Way
Telephone:	East Grinstead
01342 333129	RH19 4QA

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:

CERTIFIED

Course
 Hazardous Waste Classification
 Most recent 3 year Refresher

Date
 05 Aug 2021
 06 Aug 2024

Next 3 year Refresher due by Aug 2027

Purpose of classification

2 - Material Characterisation

Address of the waste

Molesworth Street, Rochdale, Greater Manchester

Post Code **OL16 1TQ**

SIC for the process giving rise to the waste

41201 Construction of commercial buildings

Description of industry/producer giving rise to the waste

Development of land for commercial use

Description of the specific process, sub-process and/or activity that created the waste

Excavation of soils for groundworks.

Description of the waste

Made Ground and natural soils - see logs in STL report ref. J15721 for details

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	WAC Results			Page
					Inert	SNRHW	Hazardous	
1	BH01	0.50-1.00	Hazardous	HP 7, HP 11	-	-	-	3
2	BH01[2]	1.80-3.00	Non Hazardous		-	-	-	6
3	BH02	2.50-3.00	Non Hazardous		-	-	-	8
4	BH03 (WLS02@1.75m)	1.00-2.00	Hazardous	HP 7, HP 11	N/A	Pass	Pass	10
5	BH03[2]	7.00	Non Hazardous		-	-	-	14
6	WLS01	0.20	Non Hazardous		-	-	-	16
7	WLS01[BH02 0.5-1m]	1.00	Hazardous	HP 14	N/A	Pass	Pass	18
8	WLS02	0.40	Non Hazardous		-	-	-	21
9	WLS02[2]	3.50	Non Hazardous		-	-	-	23
10	WLS03	0.60	Non Hazardous		-	-	-	25
11	WLS04	2.00	Non Hazardous		-	-	-	27
12	WLS05	0.20	Non Hazardous		-	-	-	29
13	WLS06	0.50	Hazardous	HP 7, HP 14	-	-	-	31

Related documents

#	Name	Description
1	STL Contaminated Soils waste - WM3 v1.2.GB Oct 2021	waste stream template used to create this Job

WAC results

WAC Settings: samples in this Job constitute a single population.

WAC limits used to evaluate the samples in this Job: "UK"

The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

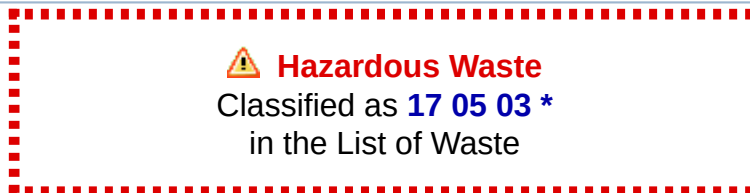
Report

Created by: Sarah Toms

Created date: 03 Oct 2024 11:49 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	34
Appendix B: Rationale for selection of metal species	35
Appendix C: Version	36

Classification of sample: BH01



Sample details

Sample name:	LoW Code:
BH01	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.50-1.00 m	Entry:
Moisture content:	17 05 03 * (Soil and stones containing hazardous substances)
8.9%	
(dry weight correction)	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

Determinands

Moisture content: 8.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		8.8 pH		8.8 pH	8.8 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				1 mg/kg	1.884	1.73 mg/kg	0.000173 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide }				18 mg/kg	1.32	21.824 mg/kg	0.00218 %	✓	
	033-003-00-0	215-481-4	1327-53-3							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
6	 boron { diboron trioxide }	005-008-00-8	215-125-8	1303-86-2	1	0.2	mg/kg	3.22	0.591	mg/kg	0.0000591 %	✓	
7	 cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.2	mg/kg	1.142	0.21	mg/kg	0.000021 %	✓	
8	 chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				1.8	mg/kg	2.27	3.752	mg/kg	0.000375 %	✓	
9	 chromium in chromium(III) compounds { chromium(III) oxide (worst case) }		215-160-9	1308-38-9		19	mg/kg	1.462	25.5	mg/kg	0.00255 %	✓	
10	 copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		57	mg/kg	1.126	58.931	mg/kg	0.00589 %	✓	
11	 lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6				92	mg/kg		84.481	mg/kg	0.00845 %	✓	
12	 mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.373	mg/kg	0.0000373 %	✓	
13	 nickel { nickel(IV) oxide (nickel dioxide) }	028-004-00-8	234-823-3	12035-36-8		31	mg/kg	1.545	43.986	mg/kg	0.0044 %	✓	
14	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1	mg/kg	1.405	1.29	mg/kg	0.000129 %	✓	
15	 vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		31	mg/kg	1.785	50.818	mg/kg	0.00508 %	✓	
16	 zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		130	mg/kg	1.245	148.588	mg/kg	0.0149 %	✓	
17	naphthalene	601-052-00-2	202-049-5	91-20-3		0.1	mg/kg		0.0918	mg/kg	0.00000918 %	✓	
18	 acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19	 acenaphthene		201-469-6	83-32-9		0.16	mg/kg		0.147	mg/kg	0.0000147 %	✓	
20	 fluorene		201-695-5	86-73-7		0.08	mg/kg		0.0735	mg/kg	0.00000735 %	✓	
21	 phenanthrene		201-581-5	85-01-8		0.82	mg/kg		0.753	mg/kg	0.0000753 %	✓	
22	 anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23	 fluoranthene		205-912-4	206-44-0		1.2	mg/kg		1.102	mg/kg	0.00011 %	✓	
24	 pyrene		204-927-3	129-00-0		1.1	mg/kg		1.01	mg/kg	0.000101 %	✓	
25	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.44	mg/kg		0.404	mg/kg	0.0000404 %	✓	
26	chrysene	601-048-00-0	205-923-4	218-01-9		0.7	mg/kg		0.643	mg/kg	0.0000643 %	✓	
27	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.59	mg/kg		0.542	mg/kg	0.0000542 %	✓	
28	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.3	mg/kg		0.275	mg/kg	0.0000275 %	✓	
29	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.48	mg/kg		0.441	mg/kg	0.0000441 %	✓	
30	 indeno[123-cd]pyrene		205-893-2	193-39-5		0.25	mg/kg		0.23	mg/kg	0.000023 %	✓	
31	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
32	benzo[ghi]perylene	205-883-8	191-24-2		0.34 mg/kg		0.312 mg/kg	0.0000312 %	✓	
33	TPH (C6 to C40) petroleum group		TPH		1200 mg/kg		1101.928 mg/kg	0.11 %	✓	
34	confirm TPH has NOT arisen from diesel or petrol				☒					
Total:								0.155 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 2000 mg/kg (0.2%) because: No visual or olfactory evidence of free product in the sample.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.11%)

Classification of sample: BH01[2]

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
BH01[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.80-3.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
17%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		8.3 pH		8.3 pH	8.3 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				1 mg/kg	1.884	1.61 mg/kg	0.000161 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		3.2 mg/kg	1.32	3.611 mg/kg	0.000361 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.3 mg/kg	1.142	0.293 mg/kg	0.0000293 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.492 mg/kg	0.000349 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		15 mg/kg	1.462	18.738 mg/kg	0.00187 %	✓	
9	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		21 mg/kg	1.126	20.208 mg/kg	0.00202 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	15 mg/kg		12.821 mg/kg	0.00128 %	✓	
11	mercury { mercury dichloride } 080-010-00-X	231-299-8	7487-94-7		0.3 mg/kg	1.353	0.347 mg/kg	0.0000347 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
12	nickel { nickel(IV) oxide (nickel dioxide) }				21 mg/kg	1.545	27.734	mg/kg	0.00277 %	✓	
	028-004-00-8	234-823-3	12035-36-8								
13	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.201	mg/kg	0.00012 %	✓	
	034-002-00-8										
14	zinc { zinc oxide }				53 mg/kg	1.245	56.384	mg/kg	0.00564 %	✓	
	030-013-00-7	215-222-5	1314-13-2								
15	naphthalene				0.05 mg/kg		0.0427	mg/kg	0.00000427 %	✓	
	601-052-00-2	202-049-5	91-20-3								
16	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
17	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
18	fluorene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7								
19	phenanthrene				0.26 mg/kg		0.222	mg/kg	0.0000222 %	✓	
		201-581-5	85-01-8								
20	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
21	fluoranthene				0.32 mg/kg		0.274	mg/kg	0.0000274 %	✓	
		205-912-4	206-44-0								
22	pyrene				0.29 mg/kg		0.248	mg/kg	0.0000248 %	✓	
		204-927-3	129-00-0								
23	benzo[a]anthracene				0.09 mg/kg		0.0769	mg/kg	0.00000769 %	✓	
	601-033-00-9	200-280-6	56-55-3								
24	chrysene				0.16 mg/kg		0.137	mg/kg	0.0000137 %	✓	
	601-048-00-0	205-923-4	218-01-9								
25	benzo[b]fluoranthene				0.12 mg/kg		0.103	mg/kg	0.0000103 %	✓	
	601-034-00-4	205-911-9	205-99-2								
26	benzo[k]fluoranthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9								
27	benzo[a]pyrene; benzo[def]chrysene				0.12 mg/kg		0.103	mg/kg	0.0000103 %	✓	
	601-032-00-3	200-028-5	50-32-8								
28	indeno[123-cd]pyrene				0.05 mg/kg		0.0427	mg/kg	0.00000427 %	✓	
		205-893-2	193-39-5								
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3								
30	benzo[ghi]perylene				0.1 mg/kg		0.0855	mg/kg	0.00000855 %	✓	
		205-883-8	191-24-2								
Total:									0.0149 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH02

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
BH02	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.50-3.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 18% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		7.7 pH		7.7 pH	7.7 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				1 mg/kg	1.884	1.597 mg/kg	0.00016 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	14.546 mg/kg	0.00145 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.194 mg/kg	0.0000194 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.463 mg/kg	0.000346 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		18 mg/kg	1.462	22.295 mg/kg	0.00223 %	✓	
9	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		65 mg/kg	1.126	62.019 mg/kg	0.0062 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	82 mg/kg		69.492 mg/kg	0.00695 %	✓	
11	mercury { mercury dichloride } 080-010-00-X	231-299-8	7487-94-7		0.3 mg/kg	1.353	0.344 mg/kg	0.0000344 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
12	nickel { nickel(IV) oxide (nickel dioxide) }				27 mg/kg	1.545	35.356	mg/kg	0.00354 %	✓	
	028-004-00-8	234-823-3	12035-36-8								
13	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.191	mg/kg	0.000119 %	✓	
	034-002-00-8										
14	zinc { zinc oxide }				58 mg/kg	1.245	61.181	mg/kg	0.00612 %	✓	
	030-013-00-7	215-222-5	1314-13-2								
15	naphthalene				0.87 mg/kg		0.737	mg/kg	0.0000737 %	✓	
	601-052-00-2	202-049-5	91-20-3								
16	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
17	acenaphthene				0.11 mg/kg		0.0932	mg/kg	0.00000932 %	✓	
		201-469-6	83-32-9								
18	fluorene				0.09 mg/kg		0.0763	mg/kg	0.00000763 %	✓	
		201-695-5	86-73-7								
19	phenanthrene				1.2 mg/kg		1.017	mg/kg	0.000102 %	✓	
		201-581-5	85-01-8								
20	anthracene				0.2 mg/kg		0.169	mg/kg	0.0000169 %	✓	
		204-371-1	120-12-7								
21	fluoranthene				1.6 mg/kg		1.356	mg/kg	0.000136 %	✓	
		205-912-4	206-44-0								
22	pyrene				1.3 mg/kg		1.102	mg/kg	0.00011 %	✓	
		204-927-3	129-00-0								
23	benzo[a]anthracene				0.54 mg/kg		0.458	mg/kg	0.0000458 %	✓	
	601-033-00-9	200-280-6	56-55-3								
24	chrysene				0.68 mg/kg		0.576	mg/kg	0.0000576 %	✓	
	601-048-00-0	205-923-4	218-01-9								
25	benzo[b]fluoranthene				0.67 mg/kg		0.568	mg/kg	0.0000568 %	✓	
	601-034-00-4	205-911-9	205-99-2								
26	benzo[k]fluoranthene				0.29 mg/kg		0.246	mg/kg	0.0000246 %	✓	
	601-036-00-5	205-916-6	207-08-9								
27	benzo[a]pyrene; benzo[def]chrysene				0.54 mg/kg		0.458	mg/kg	0.0000458 %	✓	
	601-032-00-3	200-028-5	50-32-8								
28	indeno[123-cd]pyrene				0.32 mg/kg		0.271	mg/kg	0.0000271 %	✓	
		205-893-2	193-39-5								
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3								
30	benzo[ghi]perylene				0.4 mg/kg		0.339	mg/kg	0.0000339 %	✓	
		205-883-8	191-24-2								
Total:									0.028 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH03 (WLS02@1.75m)

 **Hazardous Waste**
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:	LoW Code:
BH03 (WLS02@1.75m)	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00-2.00 m	Entry:
Moisture content:	17 05 03 * (Soil and stones containing hazardous substances)
7.5%	
(dry weight correction)	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1B; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.177%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.177%)

Determinands

Moisture content: 7.5% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		10.5 pH		10.5 pH	10.5 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				1 mg/kg	1.884	1.753 mg/kg	0.000175 %	✓	
	006-007-00-5									
4	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
5	arsenic { arsenic trioxide }				3.4 mg/kg	1.32	4.176 mg/kg	0.000418 %	✓	
	033-003-00-0	215-481-4	1327-53-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
6	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	0.2 mg/kg	1.142	0.213 mg/kg	0.0000213 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8			1.8 mg/kg	2.27	3.801 mg/kg	0.00038 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		16 mg/kg	1.462	21.753 mg/kg	0.00218 %	✓	
9	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	16 mg/kg	1.126	16.757 mg/kg	0.00168 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			9.2 mg/kg		8.558 mg/kg	0.000856 %	✓	
11	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	0.3 mg/kg	1.353	0.378 mg/kg	0.0000378 %	✓	
12	nickel { nickel(IV) oxide (nickel dioxide) }	028-004-00-8	234-823-3	12035-36-8	13 mg/kg	1.545	18.686 mg/kg	0.00187 %	✓	
13	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			1 mg/kg	1.405	1.307 mg/kg	0.000131 %	✓	
14	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2	42 mg/kg	1.245	48.631 mg/kg	0.00486 %	✓	
15	naphthalene	601-052-00-2	202-049-5	91-20-3	0.18 mg/kg		0.167 mg/kg	0.0000167 %	✓	
16	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
17	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
18	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
19	phenanthrene	201-581-5	85-01-8		0.34 mg/kg		0.316 mg/kg	0.0000316 %	✓	
20	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	fluoranthene	205-912-4	206-44-0		0.39 mg/kg		0.363 mg/kg	0.0000363 %	✓	
22	pyrene	204-927-3	129-00-0		0.42 mg/kg		0.391 mg/kg	0.0000391 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.18 mg/kg		0.167 mg/kg	0.0000167 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9	0.33 mg/kg		0.307 mg/kg	0.0000307 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.22 mg/kg		0.205 mg/kg	0.0000205 %	✓	
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.08 mg/kg		0.0744 mg/kg	0.00000744 %	✓	
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.21 mg/kg		0.195 mg/kg	0.0000195 %	✓	
28	indeno[123-cd]pyrene	205-893-2	193-39-5		0.09 mg/kg		0.0837 mg/kg	0.00000837 %	✓	
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	benzo[ghi]perylene	205-883-8	191-24-2		0.13 mg/kg		0.121 mg/kg	0.0000121 %	✓	
31	TPH (C6 to C40) petroleum group		TPH		1900 mg/kg		1767.442 mg/kg	0.177 %	✓	
32	confirm TPH has NOT arisen from diesel or petrol				☒					

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
Total:									0.19 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous Property to non-hazardous for cumulative determinand results below the threshold of: 2000 mg/kg (0.2%)
because: No visual or olfactory evidence of free product in the sample.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.177%)

WAC results for sample: BH03 (WLS02@1.75m)

WAC Settings: samples in this Job constitute a single population.

WAC limits used to evaluate this sample: "UK"

The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

The sample **PASSES** the SNRHW (Stable non-reactive hazardous waste in non-hazardous landfill) criteria.

The sample **PASSES** the Hazardous (Hazardous waste landfill) criteria.

WAC Determinands

Solid Waste Analysis				Landfill Waste Acceptance Criteria Limits		
#	Determinand		User entered data	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill
1	TOC (total organic carbon)	%	1.1	3	5	6
2	LOI (loss on ignition)	%	2	-	-	10
3	BTEX (benzene, toluene, ethylbenzene and xylenes)	mg/kg	<5	6	-	-
4	PCBs (polychlorinated biphenyls, 7 congeners)	mg/kg	<0.007	1	-	-
5	Mineral oil (C10 to C40)	mg/kg	68	500	-	-
6	PAHs (polycyclic aromatic hydrocarbons)	mg/kg	81.7	100	-	-
7	pH	pH	8.1	-	>6	-
8	ANC (acid neutralisation capacity)	mol/kg	6.7	-	-	-
Eluate Analysis 10:1						
9	arsenic	mg/kg	<0.02	0.5	2	25
10	barium	mg/kg	0.2	20	100	300
11	cadmium	mg/kg	<0.001	0.04	1	5
12	chromium	mg/kg	0.0074	0.5	10	70
13	copper	mg/kg	0.098	2	50	100
14	mercury	mg/kg	<0.007	0.01	0.2	2
15	molybdenum	mg/kg	0.054	0.5	10	30
16	nickel	mg/kg	<0.009	0.4	10	40
17	lead	mg/kg	0.02	0.5	10	50
18	antimony	mg/kg	<0.02	0.06	0.7	5
19	selenium	mg/kg	<0.05	0.1	0.5	7
20	zinc	mg/kg	4	4	50	200
21	chloride	mg/kg	28	800	15,000	25,000
22	fluoride	mg/kg	2.5	10	150	500
23	sulphate	mg/kg	79	1,000	20,000	50,000
24	phenol index	mg/kg	<0.5	1	-	-
25	DOC (dissolved organic carbon)	mg/kg	142	500	800	1,000
26	TDS (total dissolved solids)	mg/kg	630	4,000	60,000	100,000

Key

	User supplied data
	Not applicable

Classification of sample: BH03[2]

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
BH03[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
7.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
13%	
(dry weight correction)	

Hazard properties

None identified

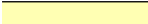
Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		8.5 pH		8.5 pH	8.5 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		6.7 mg/kg	1.32	7.828 mg/kg	0.000783 %	✓	
6	boron { diboron trioxide } 005-008-00-8	215-125-8	1303-86-2		<0.2 mg/kg	3.22	<0.644 mg/kg	<0.0000644 %		<LOD
7	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
8	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				<1.8 mg/kg	2.27	<4.086 mg/kg	<0.000409 %		<LOD
9	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		21 mg/kg	1.462	27.162 mg/kg	0.00272 %	✓	
10	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	17.935 mg/kg	0.00179 %	✓	
11	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	10 mg/kg		8.85 mg/kg	0.000885 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
12	 mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
13	 nickel { nickel(IV) oxide (nickel dioxide) }	028-004-00-8	234-823-3	12035-36-8	26 mg/kg	1.545	35.553 mg/kg	0.00356 %	✓		
14	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
15	 vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	22 mg/kg	1.785	34.756 mg/kg	0.00348 %	✓		
16	 zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2	57 mg/kg	1.245	62.786 mg/kg	0.00628 %	✓		
17	naphthalene	601-052-00-2	202-049-5	91-20-3	0.05 mg/kg		0.0442 mg/kg	0.00000442 %	✓		
18	 acenaphthylene		205-917-1	208-96-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
19	 acenaphthene		201-469-6	83-32-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
20	 fluorene		201-695-5	86-73-7	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
21	 phenanthrene		201-581-5	85-01-8	0.11 mg/kg		0.0973 mg/kg	0.00000973 %	✓		
22	 anthracene		204-371-1	120-12-7	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
23	 fluoranthene		205-912-4	206-44-0	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
24	 pyrene		204-927-3	129-00-0	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
25	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
26	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
27	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
28	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
29	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
30	 indeno[123-cd]pyrene		205-893-2	193-39-5	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
31	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
32	 benzo[ghi]perylene		205-883-8	191-24-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
33	 TPH (C6 to C40) petroleum group			TPH	<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
34	 confirm TPH has NOT arisen from diesel or petrol				☒						
Total:									0.0215 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS01

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS01	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.20 m	
Moisture content:	
7%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		10.8 pH		10.8 pH	10.8 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				1 mg/kg	1.884	1.761 mg/kg	0.000176 %	✓	
	006-007-00-5									
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide }				8.9 mg/kg	1.32	10.982 mg/kg	0.0011 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
6	cadmium { cadmium oxide }				0.6 mg/kg	1.142	0.641 mg/kg	0.0000641 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				1.8 mg/kg	2.27	3.819 mg/kg	0.000382 %	✓	
	024-017-00-8									
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				15 mg/kg	1.462	20.489 mg/kg	0.00205 %	✓	
		215-160-9	1308-38-9							
9	copper { dicopper oxide; copper (I) oxide }				42 mg/kg	1.126	44.194 mg/kg	0.00442 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	64 mg/kg		59.813 mg/kg	0.00598 %	✓	
	082-001-00-6									
11	mercury { mercury dichloride }				0.3 mg/kg	1.353	0.379 mg/kg	0.0000379 %	✓	
	080-010-00-X	231-299-8	7487-94-7							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
12	nickel { nickel(IV) oxide (nickel dioxide) }				14 mg/kg	1.545	20.217	mg/kg	0.00202 %	✓	
	028-004-00-8	234-823-3	12035-36-8								
13	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.313	mg/kg	0.000131 %	✓	
	034-002-00-8										
14	zinc { zinc oxide }				120 mg/kg	1.245	139.594	mg/kg	0.014 %	✓	
	030-013-00-7	215-222-5	1314-13-2								
15	naphthalene				0.11 mg/kg		0.103	mg/kg	0.0000103 %	✓	
	601-052-00-2	202-049-5	91-20-3								
16	acenaphthylene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8								
17	acenaphthene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9								
18	fluorene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7								
19	phenanthrene				0.24 mg/kg		0.224	mg/kg	0.0000224 %	✓	
		201-581-5	85-01-8								
20	anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7								
21	fluoranthene				0.29 mg/kg		0.271	mg/kg	0.0000271 %	✓	
		205-912-4	206-44-0								
22	pyrene				0.31 mg/kg		0.29	mg/kg	0.000029 %	✓	
		204-927-3	129-00-0								
23	benzo[a]anthracene				0.13 mg/kg		0.121	mg/kg	0.0000121 %	✓	
	601-033-00-9	200-280-6	56-55-3								
24	chrysene				0.19 mg/kg		0.178	mg/kg	0.0000178 %	✓	
	601-048-00-0	205-923-4	218-01-9								
25	benzo[b]fluoranthene				0.21 mg/kg		0.196	mg/kg	0.0000196 %	✓	
	601-034-00-4	205-911-9	205-99-2								
26	benzo[k]fluoranthene				0.06 mg/kg		0.0561	mg/kg	0.00000561 %	✓	
	601-036-00-5	205-916-6	207-08-9								
27	benzo[a]pyrene; benzo[def]chrysene				0.17 mg/kg		0.159	mg/kg	0.0000159 %	✓	
	601-032-00-3	200-028-5	50-32-8								
28	indeno[123-cd]pyrene				0.13 mg/kg		0.121	mg/kg	0.0000121 %	✓	
		205-893-2	193-39-5								
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3								
30	benzo[ghi]perylene				0.15 mg/kg		0.14	mg/kg	0.000014 %	✓	
		205-883-8	191-24-2								
Total:									0.0306 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
•	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS01[BH02 0.5-1m]

Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS01[BH02 0.5-1m]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
1.00 m	
Moisture content:	
14%	
(dry weight correction)	

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

dicopper oxide; copper (I) oxide: (compound conc.: 0.217%)

zinc oxide: (compound conc.: 0.106%)

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		8.7 pH		8.7 pH	8.7 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				3.4 mg/kg	1.884	5.619 mg/kg	0.000562 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		26 mg/kg	1.32	30.113 mg/kg	0.00301 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		1.7 mg/kg	1.142	1.703 mg/kg	0.00017 %	✓	
7	chromium in chromium(VI) compounds { chromium(VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.584 mg/kg	0.000358 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		18 mg/kg	1.462	23.077 mg/kg	0.00231 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
9	 copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	1	2200	mg/kg	1.126	2172.767	mg/kg	0.217 %	✓	
10	 lead {  lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6				240	mg/kg		210.526	mg/kg	0.0211 %	✓	
11	 mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.353	0.356	mg/kg	0.0000356 %	✓	
12	 nickel { nickel(IV) oxide (nickel dioxide) }	028-004-00-8	234-823-3	12035-36-8		33	mg/kg	1.545	44.729	mg/kg	0.00447 %	✓	
13	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.3	mg/kg	1.405	1.602	mg/kg	0.00016 %	✓	
14	 zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		970	mg/kg	1.245	1059.099	mg/kg	0.106 %	✓	
15	naphthalene	601-052-00-2	202-049-5	91-20-3		0.05	mg/kg		0.0439	mg/kg	0.00000439 %	✓	
16	 acenaphthylene		205-917-1	208-96-8		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
17	 acenaphthene		201-469-6	83-32-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
18	 fluorene		201-695-5	86-73-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
19	 phenanthrene		201-581-5	85-01-8		0.18	mg/kg		0.158	mg/kg	0.0000158 %	✓	
20	 anthracene		204-371-1	120-12-7		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
21	 fluoranthene		205-912-4	206-44-0		0.13	mg/kg		0.114	mg/kg	0.0000114 %	✓	
22	 pyrene		204-927-3	129-00-0		0.13	mg/kg		0.114	mg/kg	0.0000114 %	✓	
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.08	mg/kg		0.0702	mg/kg	0.00000702 %	✓	
24	chrysene	601-048-00-0	205-923-4	218-01-9		0.11	mg/kg		0.0965	mg/kg	0.00000965 %	✓	
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.05	mg/kg		0.0439	mg/kg	0.00000439 %	✓	
28	 indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
30	 benzo[ghi]perylene		205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
Total:											0.356 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

WAC results for sample: WLS01[BH02 0.5-1m]

WAC Settings: samples in this Job constitute a single population.

WAC limits used to evaluate this sample: "UK"

The WAC used in this report are the WAC defined for the inert, stable non-reactive hazardous and hazardous classes of landfill in the UK. You should check the actual acceptance criteria when the disposal site is identified as they may differ from the generic WAC used in this report.

The sample **PASSES** the SNRHW (Stable non-reactive hazardous waste in non-hazardous landfill) criteria.

The sample **PASSES** the Hazardous (Hazardous waste landfill) criteria.

WAC Determinands

Solid Waste Analysis				Landfill Waste Acceptance Criteria Limits		
#	Determinand		User entered data	Inert waste landfill	Stable non-reactive hazardous waste in non-hazardous landfill	Hazardous waste landfill
1	TOC (total organic carbon)	%	2.8	3	5	6
2	LOI (loss on ignition)	%	6.4	-	-	10
3	BTEX (benzene, toluene, ethylbenzene and xylenes)	mg/kg	<5	6	-	-
4	PCBs (polychlorinated biphenyls, 7 congeners)	mg/kg	<0.007	1	-	-
5	Mineral oil (C10 to C40)	mg/kg	590	500	-	-
6	PAHs (polycyclic aromatic hydrocarbons)	mg/kg	216	100	-	-
7	pH	pH	8.4	-	>6	-
8	ANC (acid neutralisation capacity)	mol/kg	13	-	-	-
Eluate Analysis 10:1						
9	arsenic	mg/kg	0.024	0.5	2	25
10	barium	mg/kg	0.022	20	100	300
11	cadmium	mg/kg	0.0001	0.04	1	5
12	chromium	mg/kg	0.026	0.5	10	70
13	copper	mg/kg	0.21	2	50	100
14	mercury	mg/kg	<0.007	0.01	0.2	2
15	molybdenum	mg/kg	0.026	0.5	10	30
16	nickel	mg/kg	0.03	0.4	10	40
17	lead	mg/kg	<0.017	0.5	10	50
18	antimony	mg/kg	<0.02	0.06	0.7	5
19	selenium	mg/kg	<0.05	0.1	0.5	7
20	zinc	mg/kg	0.097	4	50	200
21	chloride	mg/kg	23	800	15,000	25,000
22	fluoride	mg/kg	2.3	10	150	500
23	sulphate	mg/kg	55	1,000	20,000	50,000
24	phenol index	mg/kg	<0.5	1	-	-
25	DOC (dissolved organic carbon)	mg/kg	57.1	500	800	1,000
26	TDS (total dissolved solids)	mg/kg	270	4,000	60,000	100,000

Key

	User supplied data
	Not applicable

Classification of sample: WLS02

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS02	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.40 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.4%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.4% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH				8.4 pH		8.4 pH	8.4 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				1.1 mg/kg	1.884	1.93 mg/kg	0.000193 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		5.6 mg/kg	1.32	6.884 mg/kg	0.000688 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.3 mg/kg	1.142	0.319 mg/kg	0.0000319 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.804 mg/kg	0.00038 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		22 mg/kg	1.462	29.939 mg/kg	0.00299 %	✓	
9	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		13 mg/kg	1.126	13.628 mg/kg	0.00136 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	18 mg/kg		16.76 mg/kg	0.00168 %	✓	
11	mercury { mercury dichloride } 080-010-00-X	231-299-8	7487-94-7		0.3 mg/kg	1.353	0.378 mg/kg	0.0000378 %	✓	

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
12		nickel { nickel(IV) oxide (nickel dioxide) }				23 mg/kg	1.545	33.091 mg/kg	0.00331 %	✓	
		028-004-00-8	234-823-3	12035-36-8							
13		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.308 mg/kg	0.000131 %	✓	
		034-002-00-8									
14		zinc { zinc oxide }				62 mg/kg	1.245	71.855 mg/kg	0.00719 %	✓	
		030-013-00-7	215-222-5	1314-13-2							
15		naphthalene				0.05 mg/kg		0.0466 mg/kg	0.00000466 %	✓	
		601-052-00-2	202-049-5	91-20-3							
16		acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8							
17		acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9							
18		fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7							
19		phenanthrene				0.07 mg/kg		0.0652 mg/kg	0.00000652 %	✓	
			201-581-5	85-01-8							
20		anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7							
21		fluoranthene				0.11 mg/kg		0.102 mg/kg	0.0000102 %	✓	
			205-912-4	206-44-0							
22		pyrene				0.09 mg/kg		0.0838 mg/kg	0.00000838 %	✓	
			204-927-3	129-00-0							
23		benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-033-00-9	200-280-6	56-55-3							
24		chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-048-00-0	205-923-4	218-01-9							
25		benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2							
26		benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-036-00-5	205-916-6	207-08-9							
27		benzo[a]pyrene; benzo[def]chrysene				0.05 mg/kg		0.0466 mg/kg	0.00000466 %	✓	
		601-032-00-3	200-028-5	50-32-8							
28		indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-893-2	193-39-5							
29		dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3							
30		benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2							
Total:									0.0182 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS02[2]

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS02[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
3.50 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH				8.3 pH		8.3 pH	8.3 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				2.7 mg/kg	1.884	4.423 mg/kg	0.000442 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		9.3 mg/kg	1.32	10.677 mg/kg	0.00107 %	✓	
6	boron { diboron trioxide } 005-008-00-8	215-125-8	1303-86-2		0.5 mg/kg	3.22	1.4 mg/kg	0.00014 %	✓	
7	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.3 mg/kg	1.142	0.298 mg/kg	0.0000298 %	✓	
8	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.553 mg/kg	0.000355 %	✓	
9	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		24 mg/kg	1.462	30.502 mg/kg	0.00305 %	✓	
10	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		33 mg/kg	1.126	32.308 mg/kg	0.00323 %	✓	
11	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	53 mg/kg		46.087 mg/kg	0.00461 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
12	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	0.3 mg/kg	1.353	0.353 mg/kg	0.0000353 %	✓	
13	nickel { nickel(IV) oxide (nickel dioxide) }	028-004-00-8	234-823-3	12035-36-8	30 mg/kg	1.545	40.309 mg/kg	0.00403 %	✓	
14	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			1.1 mg/kg	1.405	1.344 mg/kg	0.000134 %	✓	
15	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1	27 mg/kg	1.785	41.913 mg/kg	0.00419 %	✓	
16	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2	70 mg/kg	1.245	75.765 mg/kg	0.00758 %	✓	
17	naphthalene	601-052-00-2	202-049-5	91-20-3	0.05 mg/kg		0.0435 mg/kg	0.00000435 %	✓	
18	acenaphthylene	205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
19	acenaphthene	201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	fluorene	201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	phenanthrene	201-581-5	85-01-8		0.16 mg/kg		0.139 mg/kg	0.0000139 %	✓	
22	anthracene	204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	fluoranthene	205-912-4	206-44-0		0.15 mg/kg		0.13 mg/kg	0.000013 %	✓	
24	pyrene	204-927-3	129-00-0		0.15 mg/kg		0.13 mg/kg	0.000013 %	✓	
25	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	chrysene	601-048-00-0	205-923-4	218-01-9	0.08 mg/kg		0.0696 mg/kg	0.00000696 %	✓	
27	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
28	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.05 mg/kg		0.0435 mg/kg	0.00000435 %	✓	
30	indeno[123-cd]pyrene	205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
32	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
Total:								0.0291 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS03

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS03	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.60 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
7.4%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 7.4% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH				11 pH		11 pH	11pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				1 mg/kg	1.884	1.754 mg/kg	0.000175 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	14.752 mg/kg	0.00148 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.2 mg/kg	1.142	0.213 mg/kg	0.0000213 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.804 mg/kg	0.00038 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		21 mg/kg	1.462	28.578 mg/kg	0.00286 %	✓	
9	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		50 mg/kg	1.126	52.416 mg/kg	0.00524 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	43 mg/kg		40.037 mg/kg	0.004 %	✓	
11	mercury { mercury dichloride } 080-010-00-X	231-299-8	7487-94-7		2.8 mg/kg	1.353	3.529 mg/kg	0.000353 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
12	nickel { nickel(IV) oxide (nickel dioxide) }				25 mg/kg	1.545	35.968 mg/kg	0.0036 %	✓		
	028-004-00-8	234-823-3	12035-36-8								
13	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.2 mg/kg	1.405	1.57 mg/kg	0.000157 %	✓		
	034-002-00-8										
14	zinc { zinc oxide }				110 mg/kg	1.245	127.485 mg/kg	0.0127 %	✓		
	030-013-00-7	215-222-5	1314-13-2								
15	naphthalene				0.05 mg/kg		0.0466 mg/kg	0.00000466 %	✓		
	601-052-00-2	202-049-5	91-20-3								
16	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
		205-917-1	208-96-8								
17	acenaphthene				0.14 mg/kg		0.13 mg/kg	0.000013 %	✓		
		201-469-6	83-32-9								
18	fluorene				0.1 mg/kg		0.0931 mg/kg	0.00000931 %	✓		
		201-695-5	86-73-7								
19	phenanthrene				1.3 mg/kg		1.21 mg/kg	0.000121 %	✓		
		201-581-5	85-01-8								
20	anthracene				0.27 mg/kg		0.251 mg/kg	0.0000251 %	✓		
		204-371-1	120-12-7								
21	fluoranthene				1.7 mg/kg		1.583 mg/kg	0.000158 %	✓		
		205-912-4	206-44-0								
22	pyrene				1.6 mg/kg		1.49 mg/kg	0.000149 %	✓		
		204-927-3	129-00-0								
23	benzo[a]anthracene				0.69 mg/kg		0.642 mg/kg	0.0000642 %	✓		
	601-033-00-9	200-280-6	56-55-3								
24	chrysene				0.85 mg/kg		0.791 mg/kg	0.0000791 %	✓		
	601-048-00-0	205-923-4	218-01-9								
25	benzo[b]fluoranthene				1 mg/kg		0.931 mg/kg	0.0000931 %	✓		
	601-034-00-4	205-911-9	205-99-2								
26	benzo[k]fluoranthene				0.32 mg/kg		0.298 mg/kg	0.0000298 %	✓		
	601-036-00-5	205-916-6	207-08-9								
27	benzo[a]pyrene; benzo[def]chrysene				0.79 mg/kg		0.736 mg/kg	0.0000736 %	✓		
	601-032-00-3	200-028-5	50-32-8								
28	indeno[123-cd]pyrene				0.43 mg/kg		0.4 mg/kg	0.00004 %	✓		
		205-893-2	193-39-5								
29	dibenz[a,h]anthracene				0.13 mg/kg		0.121 mg/kg	0.0000121 %	✓		
	601-041-00-2	200-181-8	53-70-3								
30	benzo[ghi]perylene				0.49 mg/kg		0.456 mg/kg	0.0000456 %	✓		
		205-883-8	191-24-2								
Total:									0.032 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
●	Determinand defined or amended by HazWasteOnline (see Appendix A)
●	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS04

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS04	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH				8.2 pH		8.2 pH	8.2 pH		
3	arsenic { arsenic trioxide }				44 mg/kg	1.32	50.081 mg/kg	0.00501 %	✓	
4	boron { diboron trioxide }				0.6 mg/kg	3.22	1.665 mg/kg	0.000167 %	✓	
5	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.197 mg/kg	0.0000197 %	✓	
6	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				27 mg/kg	2.27	52.836 mg/kg	0.00528 %	✓	
7	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27 mg/kg	1.462	34.019 mg/kg	0.0034 %	✓	
8	copper { dicopper oxide; copper (I) oxide }				300 mg/kg	1.126	291.178 mg/kg	0.0291 %	✓	
9	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	340 mg/kg		293.103 mg/kg	0.0293 %	✓	
10	mercury { mercury dichloride }				0.3 mg/kg	1.353	0.35 mg/kg	0.000035 %	✓	
11	nickel { nickel(IV) oxide (nickel dioxide) }				48 mg/kg	1.545	63.939 mg/kg	0.00639 %	✓	
12	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.211 mg/kg	0.000121 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
13	vanadium { divanadium pentaoxide; vanadium pentoxide }				53 mg/kg	1.785	81.564 mg/kg	0.00816 %	✓	
	023-001-00-8	215-239-8	1314-62-1							
14	zinc { zinc oxide }				200 mg/kg	1.245	214.606 mg/kg	0.0215 %	✓	
	030-013-00-7	215-222-5	1314-13-2							
15	naphthalene				5.9 mg/kg		5.086 mg/kg	0.000509 %	✓	
	601-052-00-2	202-049-5	91-20-3							
16	acenaphthylene				0.39 mg/kg		0.336 mg/kg	0.0000336 %	✓	
		205-917-1	208-96-8							
17	acenaphthene				18 mg/kg		15.517 mg/kg	0.00155 %	✓	
		201-469-6	83-32-9							
18	fluorene				13 mg/kg		11.207 mg/kg	0.00112 %	✓	
		201-695-5	86-73-7							
19	phenanthrene				81 mg/kg		69.828 mg/kg	0.00698 %	✓	
		201-581-5	85-01-8							
20	anthracene				21 mg/kg		18.103 mg/kg	0.00181 %	✓	
		204-371-1	120-12-7							
21	fluoranthene				92 mg/kg		79.31 mg/kg	0.00793 %	✓	
		205-912-4	206-44-0							
22	pyrene				77 mg/kg		66.379 mg/kg	0.00664 %	✓	
		204-927-3	129-00-0							
23	benzo[a]anthracene				35 mg/kg		30.172 mg/kg	0.00302 %	✓	
	601-033-00-9	200-280-6	56-55-3							
24	chrysene				43 mg/kg		37.069 mg/kg	0.00371 %	✓	
	601-048-00-0	205-923-4	218-01-9							
25	benzo[b]fluoranthene				39 mg/kg		33.621 mg/kg	0.00336 %	✓	
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				13 mg/kg		11.207 mg/kg	0.00112 %	✓	
	601-036-00-5	205-916-6	207-08-9							
27	benzo[a]pyrene; benzo[def]chrysene				27 mg/kg		23.276 mg/kg	0.00233 %	✓	
	601-032-00-3	200-028-5	50-32-8							
28	indeno[123-cd]pyrene				14 mg/kg		12.069 mg/kg	0.00121 %	✓	
		205-893-2	193-39-5							
29	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
30	benzo[ghi]perylene				16 mg/kg		13.793 mg/kg	0.00138 %	✓	
		205-883-8	191-24-2							
Total:								0.151 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
•	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS05

✔ **Non Hazardous Waste**
Classified as **17 05 04**
in the List of Waste

Sample details

Sample name:	LoW Code:
WLS05	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.20 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
4.3%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 4.3% Dry Weight Moisture Correction applied (MC)

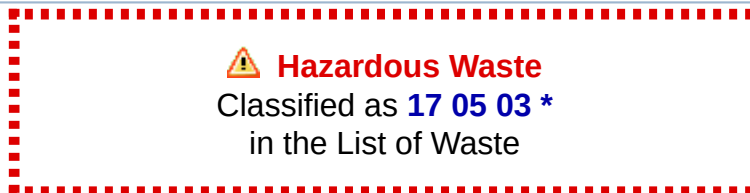
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		8.5 pH		8.5 pH	8.5 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				1.5 mg/kg	1.884	2.709 mg/kg	0.000271 %	✓	
4	phenol 604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
5	arsenic { arsenic trioxide } 033-003-00-0	215-481-4	1327-53-3		8 mg/kg	1.32	10.127 mg/kg	0.00101 %	✓	
6	cadmium { cadmium oxide } 048-002-00-0	215-146-2	1306-19-0		0.8 mg/kg	1.142	0.876 mg/kg	0.0000876 %	✓	
7	chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8				1.8 mg/kg	2.27	3.918 mg/kg	0.000392 %	✓	
8	chromium in chromium(III) compounds { chromium(III) oxide (worst case) } 215-160-9		1308-38-9		16 mg/kg	1.462	22.421 mg/kg	0.00224 %	✓	
9	copper { dicopper oxide; copper (I) oxide } 029-002-00-X	215-270-7	1317-39-1		200 mg/kg	1.126	215.894 mg/kg	0.0216 %	✓	
10	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	110 mg/kg		105.465 mg/kg	0.0105 %	✓	
11	mercury { mercury dichloride } 080-010-00-X	231-299-8	7487-94-7		0.3 mg/kg	1.353	0.389 mg/kg	0.0000389 %	✓	

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
12		nickel { nickel(IV) oxide (nickel dioxide) }				16 mg/kg	1.545	23.704 mg/kg	0.00237 %	✓	
		028-004-00-8	234-823-3	12035-36-8							
13		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1 mg/kg	1.405	1.347 mg/kg	0.000135 %	✓	
		034-002-00-8									
14		zinc { zinc oxide }				290 mg/kg	1.245	346.085 mg/kg	0.0346 %	✓	
		030-013-00-7	215-222-5	1314-13-2							
15		naphthalene				0.05 mg/kg		0.0479 mg/kg	0.00000479 %	✓	
		601-052-00-2	202-049-5	91-20-3							
16		acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8							
17		acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9							
18		fluorene				0.06 mg/kg		0.0575 mg/kg	0.00000575 %	✓	
			201-695-5	86-73-7							
19		phenanthrene				0.56 mg/kg		0.537 mg/kg	0.0000537 %	✓	
			201-581-5	85-01-8							
20		anthracene				0.12 mg/kg		0.115 mg/kg	0.0000115 %	✓	
			204-371-1	120-12-7							
21		fluoranthene				1.1 mg/kg		1.055 mg/kg	0.000105 %	✓	
			205-912-4	206-44-0							
22		pyrene				1 mg/kg		0.959 mg/kg	0.0000959 %	✓	
			204-927-3	129-00-0							
23		benzo[a]anthracene				0.46 mg/kg		0.441 mg/kg	0.0000441 %	✓	
		601-033-00-9	200-280-6	56-55-3							
24		chrysene				0.7 mg/kg		0.671 mg/kg	0.0000671 %	✓	
		601-048-00-0	205-923-4	218-01-9							
25		benzo[b]fluoranthene				0.56 mg/kg		0.537 mg/kg	0.0000537 %	✓	
		601-034-00-4	205-911-9	205-99-2							
26		benzo[k]fluoranthene				0.23 mg/kg		0.221 mg/kg	0.0000221 %	✓	
		601-036-00-5	205-916-6	207-08-9							
27		benzo[a]pyrene; benzo[def]chrysene				0.4 mg/kg		0.384 mg/kg	0.0000384 %	✓	
		601-032-00-3	200-028-5	50-32-8							
28		indeno[123-cd]pyrene				0.2 mg/kg		0.192 mg/kg	0.0000192 %	✓	
			205-893-2	193-39-5							
29		dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		601-041-00-2	200-181-8	53-70-3							
30		benzo[ghi]perylene				0.31 mg/kg		0.297 mg/kg	0.0000297 %	✓	
			205-883-8	191-24-2							
Total:									0.074 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS06



Sample details

Sample name:	LoW Code:	
WLS06	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
0.50 m		
Moisture content:		
21%		
(dry weight correction)		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.19%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.19%)
zinc oxide: (compound conc.: 0.123%)

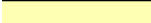
Determinands

Moisture content: 21% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	asbestos 650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
2	pH		PH		7.9 pH		7.9 pH	7.9 pH		
3	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				8.1 mg/kg	1.884	12.612 mg/kg	0.00126 %	✓	
	006-007-00-5									
4	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
5	arsenic { arsenic trioxide }				48 mg/kg	1.32	52.377 mg/kg	0.00524 %	✓	
	033-003-00-0	215-481-4	1327-53-3							

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used		
		EU CLP index number	EC Number	CAS Number									
6		cadmium { cadmium oxide }				2.6	mg/kg	1.142	2.455	mg/kg	0.000245 %	✓	
		048-002-00-0	215-146-2	1306-19-0									
7		chromium in chromium(VI) compounds { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }				36	mg/kg	2.27	67.537	mg/kg	0.00675 %	✓	
		024-017-00-8											
8		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				68	mg/kg	1.462	82.137	mg/kg	0.00821 %	✓	
			215-160-9	1308-38-9									
9		copper { dicopper oxide; copper (I) oxide }				390	mg/kg	1.126	362.89	mg/kg	0.0363 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
10		lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	2300	mg/kg		1900.826	mg/kg	0.19 %	✓	
		082-001-00-6											
11		mercury { mercury dichloride }				1.6	mg/kg	1.353	1.79	mg/kg	0.000179 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
12		nickel { nickel(IV) oxide (nickel dioxide) }				27	mg/kg	1.545	34.479	mg/kg	0.00345 %	✓	
		028-004-00-8	234-823-3	12035-36-8									
13		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.1	mg/kg	1.405	1.277	mg/kg	0.000128 %	✓	
		034-002-00-8											
14		zinc { zinc oxide }				1200	mg/kg	1.245	1234.427	mg/kg	0.123 %	✓	
		030-013-00-7	215-222-5	1314-13-2									
15		naphthalene				6.4	mg/kg		5.289	mg/kg	0.000529 %	✓	
		601-052-00-2	202-049-5	91-20-3									
16		acenaphthylene				0.28	mg/kg		0.231	mg/kg	0.0000231 %	✓	
			205-917-1	208-96-8									
17		acenaphthene				7	mg/kg		5.785	mg/kg	0.000579 %	✓	
			201-469-6	83-32-9									
18		fluorene				4.2	mg/kg		3.471	mg/kg	0.000347 %	✓	
			201-695-5	86-73-7									
19		phenanthrene				28	mg/kg		23.14	mg/kg	0.00231 %	✓	
			201-581-5	85-01-8									
20		anthracene				5.6	mg/kg		4.628	mg/kg	0.000463 %	✓	
			204-371-1	120-12-7									
21		fluoranthene				24	mg/kg		19.835	mg/kg	0.00198 %	✓	
			205-912-4	206-44-0									
22		pyrene				20	mg/kg		16.529	mg/kg	0.00165 %	✓	
			204-927-3	129-00-0									
23		benzo[a]anthracene				10	mg/kg		8.264	mg/kg	0.000826 %	✓	
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				10	mg/kg		8.264	mg/kg	0.000826 %	✓	
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				12	mg/kg		9.917	mg/kg	0.000992 %	✓	
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				3.9	mg/kg		3.223	mg/kg	0.000322 %	✓	
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				9.2	mg/kg		7.603	mg/kg	0.00076 %	✓	
		601-032-00-3	200-028-5	50-32-8									
28		indeno[123-cd]pyrene				4.7	mg/kg		3.884	mg/kg	0.000388 %	✓	
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				1.3	mg/kg		1.074	mg/kg	0.000107 %	✓	
		601-041-00-2	200-181-8	53-70-3									
30		benzo[ghi]perylene				5	mg/kg		4.132	mg/kg	0.000413 %	✓	
			205-883-8	191-24-2									
Total:									0.388 %				

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non GB MCL determinands

■ pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

■ salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex

GB MCL index number: 006-007-00-5
Description/Comments: Conversion factor based on a worst case compound: sodium cyanide
Additional Hazard Statement(s): EUH032 >= 0.2 %
Reason for additional Hazards Statement(s):
20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

■ chromium(III) oxide (worst case) (EC Number: 215-160-9, CAS Number: 1308-38-9)

Description/Comments: Data from C&L Inventory Database
Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H332 , Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Resp. Sens. 1; H334 , Skin Sens. 1; H317 , Repr. 1B; H360FD , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

■ lead compounds with the exception of those specified elsewhere in this Annex (worst case)

GB MCL index number: 082-001-00-6
Description/Comments: Worst Case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers lead compounds from smelting industries, flue dust and similar to be Carcinogenic category 1A
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015

■ acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

■ acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Aquatic Chronic 2; H411

■ fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

■ phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 2015
Hazard Statements: Acute Tox. 4; H302 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Carc. 2; H351 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410 , Skin Irrit. 2; H315

■ anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315 , Skin Sens. 1; H317 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2; H351

▪ **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: Flam. Liq. 3; H226 , Asp. Tox. 1; H304 , STOT RE 2; H373 , Muta. 1B; H340 , Carc. 1B; H350 , Repr. 2; H361d , Aquatic Chronic 2; H411

▪ **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

Appendix B: Rationale for selection of metal species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide].

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds.

boron {diboron trioxide}

site specific

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history.

chromium in chromium(VI) compounds {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Not enough Chromium to select the worst case species.

chromium in chromium(III) compounds {chromium(III) oxide (worst case)}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass.

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. Worst case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected.

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

Reasonable case CLP species based on hazard statements/molecular weight and site history. Worst Case lead chromate is not expected to be present in the soil given the low concentration of Cr VI recorded in the soil.

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight.

nickel {nickel(IV) oxide (nickel dioxide)}

Reasonable case CLP species based on hazard statements/molecular weight and site history. Worst Case nickel chromate is not expected to be present in the soil given the low concentration of Cr VI recorded in the soil.

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil.

vanadium {divanadium pentaoxide; vanadium pentoxide}

default

zinc {zinc oxide}

Reasonable case CLP species based on hazard statements/molecular weight and site history. Worst Case Zinc chromate is not expected to be present in the soil given the low concentration of Cr VI recorded in the soil. zinc sulphate is very soluble and likely to have been leached away if ever present and. Furthermore, not enough soluble sulphate detected.

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**

HazWasteOnline Classification Engine Version: 2024.271.6257.11459 (29 Sep 2024)

HazWasteOnline Database: 2024.271.6257.11459 (29 Sep 2024)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Waste 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021

GB MCL List v2.0 - version 2.0 of 20th October 2023

GB MCL List v3.0 - version 3.0 of 11th January 2024

GB MCL List v4.0 - version 4.0 of 2nd March 2024

GB MCL List v5.0 - version 5.0 of 26th June 2024

APPENDIX G
Monitoring Data

G

ESS

Environmental Site Sampling Ltd

13th August 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6802

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 13th August 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

In-situ Analysis: ST/6802

Client: Southern Testing
Project: J15721, Molesworth Street, Rochdale, OL16 1TL

13/08/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	3	0.4	<0.1	<0.1	<2	<2	4.1	4.1	14.2	14.2	<1	<1	3.06m
BH02	<0.1	1	1.7	<0.1	<0.1	<2	<2	0.2	0.2	15.7	15.7	<1	<1	2.57m
BH03	0.3	32	0.3	<0.1	<0.1	<2	<2	2.4	2.4	19.1	19.1	<1	<1	3.03m
WLS01	<0.1	3	0.6	<0.1	<0.1	<2	<2	0.1	0.1	20.2	20.2	<1	<1	1.98m
WLS02	<0.1	2	0.7	<0.1	<0.1	<2	<2	2.1	2.1	15.4	15.4	<1	<1	3.68m
WLS05	<0.1	3	0.3	<0.1	<0.1	<2	<2	4.6	4.6	12.1	12.1	<1	<1	2.45m
WLS08	0.1	12	1.1	<0.1	<0.1	<2	<2	7.8	7.8	9.4	9.4	<1	<1	1.83m
Notes: Monitoring order is from left to right. Steady concentrations are measured up to 3 minutes.														

Additional Information	
Date Monitoring Undertaken:	13 th August 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rotherham a.m. (mb):	1006mb
Atmos. Pressure On-site (mb):	1006mb
Atmos. Pressure Rotherham p.m. (mb):	1009mb
Weather During Visit:	Sunny, Dry, Wind S, 2m/s, 20°C
Comments:	

ESS**Environmental Site Sampling Ltd**

28th August 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6811

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 28th August 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

In-situ Analysis: ST/6811

Client: Southern Testing

Project: J15721, Molesworth Street, Rochdale, OL16 1TL

28/08/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	3	0.9	<0.1	<0.1	<2	<2	0.8	0.8	17.6	17.6	<1	<1	2.89m
BH02	0.1	4	0.3	<0.1	<0.1	<2	<2	0.1	0.1	20.4	20.4	<1	<1	2.53m
BH03	0.2	19	0.5	<0.1	<0.1	<2	<2	2.8	2.8	18.6	18.6	<1	<1	3.05m
WLS01	<0.1	1	0.7	<0.1	<0.1	<2	<2	1.3	1.3	16.9	16.9	<1	<1	1.97m
WLS02	<0.1	2	1.2	<0.1	<0.1	<2	<2	1.6	1.6	8.2	8.2	<1	<1	3.67m
WLS05	<0.1	2	0.4	<0.1	<0.1	<2	<2	5.1	5.1	12.2	12.2	<1	<1	2.60m
WLS08	0.2	17	0.9	<0.1	<0.1	<2	<2	10.6	10.6	5.1	5.1	<1	<1	1.84m

Notes:

Monitoring order is from left to right.

Steady concentrations are measured up to 3 minutes.

Additional Information

Date Monitoring Undertaken:	28 th August 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rotherham a.m. (mb):	1009mb
Atmos. Pressure On-site (mb):	1011mb
Atmos. Pressure Rotherham p.m. (mb):	1014mb
Weather During Visit:	Overcast, Raining, Wind SW, 5m/s, 16°C
Comments:	

ESS**Environmental Site Sampling Ltd**

11th September 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6824

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 11th September 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

In-situ Analysis: ST/6824

Client: Southern Testing
Project: J15721, Molesworth Street, Rochdale, OL16 1TL

11/09/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	3	0.6	<0.1	<0.1	<2	<2	0.8	0.8	16.3	16.3	<1	<1	2.11m
BH02	<0.1	4	0.7	<0.1	<0.1	<2	<2	0.6	0.6	19.1	19.1	<1	<1	2.52m
BH03	0.4	27	1.7	<0.1	<0.1	<2	<2	2.3	2.3	18.9	18.9	<1	<1	2.86m
WLS01	0.1	12	0.9	<0.1	<0.1	<2	<2	1.9	1.9	17.2	17.2	<1	<1	1.70m
WLS02	<0.1	2	1.9	<0.1	<0.1	<2	<2	1.5	1.5	6.3	6.3	<1	<1	3.52m
WLS05	<0.1	2	0.8	<0.1	<0.1	<2	<2	4.6	4.6	14.1	14.1	<1	<1	2.42m
WLS08	<0.1	17	0.6	<0.1	<0.1	<2	<2	6.4	6.4	8.2	8.2	<1	<1	1.53m
Notes: Monitoring order is from left to right. Steady concentrations are measured up to 3 minutes.														

Additional Information	
Date Monitoring Undertaken:	11 th September 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rochdale a.m. (mb):	1007mb
Atmos. Pressure On-site (mb):	1006mb
Atmos. Pressure Rochdale p.m. (mb):	1011mb
Weather During Visit:	Overcast, Raining, Wind NE, 6m/s, 10°C
Comments:	

ESS

Environmental Site Sampling Ltd

25th September 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6835

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 25th September 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

In-situ Analysis: ST/6835

Client: Southern Testing
Project: J15721, Molesworth Street, Rochdale, OL16 1TL

25/09/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	1	0.8	<0.1	<0.1	<2	<2	2.3	2.3	17.5	17.5	<1	<1	3.02m
BH02	<0.1	3	0.4	<0.1	<0.1	<2	<2	0.3	0.3	20.2	20.2	<1	<1	2.56m
BH03	0.3	26	1.4	<0.1	<0.1	<2	<2	3.1	3.1	17.7	17.7	<1	<1	3.08m
WLS01	0.1	11	0.5	<0.1	<0.1	<2	<2	2.7	2.7	17.9	17.9	<1	<1	1.914
WLS02	<0.1	2	0.7	<0.1	<0.1	<2	<2	3.4	3.4	14.2	14.2	<1	<1	3.65m
WLS05	0.1	12	0.3	<0.1	<0.1	<2	<2	7.2	7.2	9.1	9.1	<1	<1	2.46m
WLS08	<0.1	3	0.9	<0.1	<0.1	<2	<2	3.6	3.6	14.6	14.6	<1	<1	1.76m
Notes: Monitoring order is from left to right. Steady concentrations are measured up to 3 minutes.														

Additional Information	
Date Monitoring Undertaken:	25 th September 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rochdale a.m. (mb):	1000mb
Atmos. Pressure On-site (mb):	0999mb
Atmos. Pressure Rochdale p.m. (mb):	0995mb
Weather During Visit:	Overcast, Dry, Wind S, 5m/s, 9°C
Comments:	

ESS**Environmental Site Sampling Ltd**

8th October 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6845

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 8th October 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

In-situ Analysis: ST/6845

Client: Southern Testing

Project: J15721, Molesworth Street, Rochdale, OL16 1TL

08/10/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	4	0.6	<0.1	<0.1	<2	<2	2.1	2.1	16.4	16.4	<1	<1	2.97m
BH02	<0.1	3	0.4	<0.1	<0.1	<2	<2	0.2	0.2	20.1	20.1	<1	<1	2.54m
BH03	0.2	21	1.8	<0.1	<0.1	<2	<2	3.2	3.2	16.5	16.5	<1	<1	3.04m
WLS01	0.1	12	1.2	<0.1	<0.1	<2	<2	0.4	0.4	19.9	19.9	<1	<1	1.90m
WLS02	<0.1	3	0.5	<0.1	<0.1	<2	<2	3.1	3.1	11.1	11.1	<1	<1	3.64m
WLS05	0.1	10	1.4	<0.1	<0.1	<2	<2	7.1	7.1	8.5	8.5	<1	<1	2.30m
WLS08	<0.1	2	0.6	<0.1	<0.1	<2	<2	2.9	2.9	15.6	15.6	<1	<1	1.66m
Notes: Monitoring order is from left to right. Steady concentrations are measured up to 3 minutes.														

Additional Information	
Date Monitoring Undertaken:	8 th October 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rochdale a.m. (mb):	0992mb
Atmos. Pressure On-site (mb):	0992mb
Atmos. Pressure Rochdale p.m. (mb):	0991mb
Weather During Visit:	Overcast, Dry, Wind E, 3m/s, 12°C
Comments:	

ESS**Environmental Site Sampling Ltd**

22nd October 2024

Ms V Francis
Southern Testing
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Environmental Site Sampling Ltd
94 Dillotford Avenue
Styvechale
Coventry
CV3 5DU

Tel : (024) 7669 0514

Mobile : 07971 664 118

e.mail: cosgrove_patrick@hotmail.com

Page 1 of 2

In-situ Analysis Report: ST/6856

Dear Ms Francis,

Please find enclosed a copy of the in-situ ground gas and vapour monitoring results undertaken at Molesworth Street, Rochdale, OL16 1TL, on 22nd October 2024.

I trust you find these satisfactory. Should you have any queries please contact us.

Yours Sincerely,

Patrick Cosgrove

P V Cosgrove BSc MSc
Environmental Site Sampling Ltd



Environmental Site Sampling Ltd Registered in England & Wales No. 4431348
Registered Office: 94 Dillotford Avenue Coventry CV3 5DU

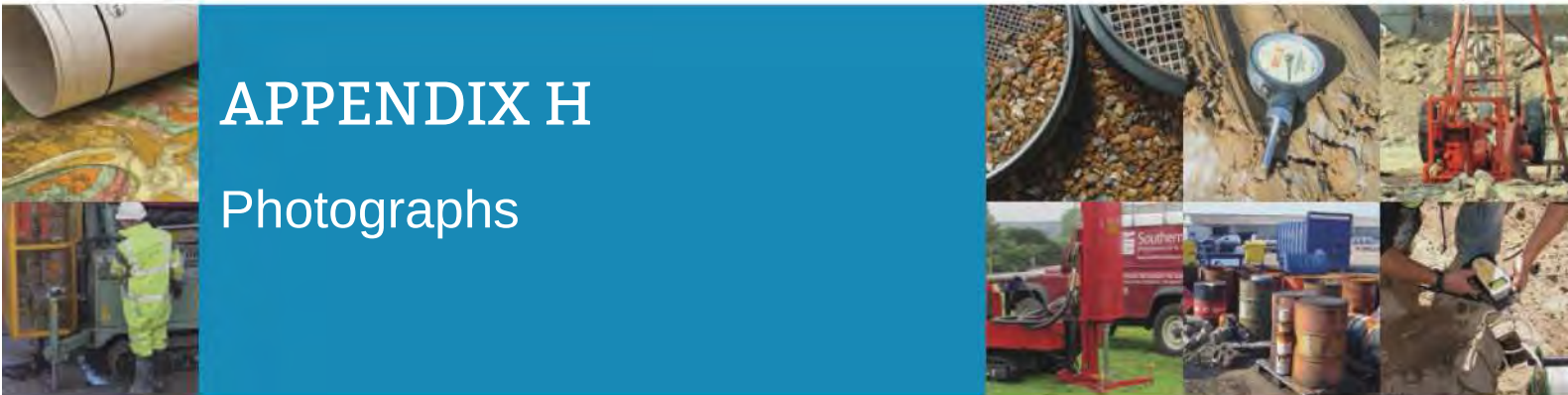
In-situ Analysis: ST/6856

Client: Southern Testing
Project: J15721, Molesworth Street, Rochdale, OL16 1TL

22/10/24

Borehole	Gas Flow (l/hr)	Borehole Pressure (Pa)	PID VOC (ppm)	Methane (%vol)		Methane (%LEL)		Carbon Dioxide (%vol)		Oxygen (%vol)		Other Gases (ppm)		Water Level (Meters)
			Peak	Peak	Steady	Peak	Steady	Peak	Steady	Peak	Steady	H ₂ S	CO	
BH01	<0.1	4	0.7	<0.1	<0.1	<2	<2	1.8	1.8	17.7	17.7	<1	<1	1.98m
BH02	<0.1	2	1.2	<0.1	<0.1	<2	<2	0.4	0.4	19.9	19.9	<1	<1	2.49m
BH03	0.3	23	1.6	<0.1	<0.1	<2	<2	3.3	3.3	16.9	16.9	<1	<1	3.01m
WLS01	0.1	14	0.4	<0.1	<0.1	<2	<2	0.3	0.3	19.8	19.8	<1	<1	1.83m
WLS02	<0.1	2	0.6	<0.1	<0.1	<2	<2	2.3	2.3	11.5	11.5	<1	<1	3.64m
WLS05	0.1	12	1.4	<0.1	<0.1	<2	<2	8.7	8.7	6.5	6.5	<1	<1	1.51m
WLS08	<0.1	3	0.5	<0.1	<0.1	<2	<2	6.7	6.7	7.9	7.9	<1	<1	2.27m
Notes: Monitoring order is from left to right. Steady concentrations are measured up to 3 minutes.														

Additional Information	
Date Monitoring Undertaken:	22 nd October 2024
Monitoring Undertaken By:	P Cosgrove
Equipment Used:	GFM436 S/N 13985, PhoCheck Tiger S/N T-118383
Atmos. Pressure Rochdale a.m. (mb):	1020mb
Atmos. Pressure On-site (mb):	1027mb
Atmos. Pressure Rochdale p.m. (mb):	1030mb
Weather During Visit:	Overcast, Dry, Wind W, 4m/s, 10°C
Comments:	



APPENDIX H

Photographs





1



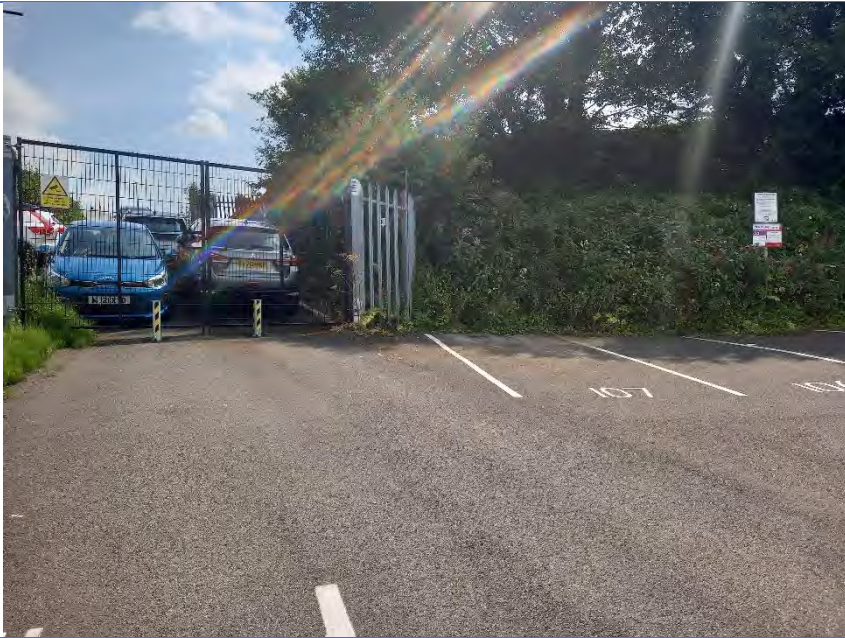
2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



17



18



19



20



21



22



23



24



25



26



27



28